SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1933

No. 709

EASTMAN KODAK COMPANY, EASTMAN KODAK COMPANY OF NEW YORK, AND EASTMAN KODAK STORES, INC., PETITIONERS,

vs.

CHARLES B. GRAY.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE THIRD CIRCUIT.

VOL. I

INDEX.

	Original	Print
Record from D. C. U. S., Eastern Pennsylvania	1	1
Docket entries	1	1
Stipulation as to record	6	4
Statement of claim	8	5
Statement of claim as amended	14	9
Notice to file affidavit of defense	20	13
Plea of defendant, Eastman Kodak Stores, Inc.	21	13
Plea of defendant, Eastman Kodak Stores, Inc., to statement of claim as amended	21	14
Notice of special matters of defense by defendant, Eastman Kodak Stores, Inc.	22	14
Further notice of special matters of defense by defendant, Eastman Kodak Stores, Inc.	24	16
Further notice of special matters of defense (supplemental)	26	17

JUDD & DETWEILER (INC.), PRINTERS, WASHINGTON, D. C., FEBRUARY 15, 1934
—4580-C

	Original	Print
Plea of defendant, Eastman Kodak Company (of New Jersey), to statement of claim as amended	27	17
Plea of defendant, Eastman Kodak Company (of New York) to statement of claim as amended	28	18
Bill of exceptions	29	18
Caption	29	18
Appearances	31	19
Stipulation as to certain facts	32	20
Stipulation as to certain facts	34	21
Notice and supplemental notice as to releases relied upon	35	22
Testimony of Charles B. Gray	37	24
Offer in evidence—Tabulation of number of alleged infringing releases manufactured	83	60
Testimony of Myron F. Hill	83	60
Testimony of Louis A. Darling	99	72
Renewal of motion to quash, etc.	104	76
Testimony of Albert K. Chapman	105	77
Harry L. Thomas	108	79
Joseph E. Siegfried	114	85
William H. Zimmer	118	88
Newton M. Perrins (recalled)	131	98
John Christy	140	105
Offers in evidence	156	117
Agreement re defendants' exhibit 1	157	118
Charge of the Court	157	118
Defendants' points for charge	178	135
Defendants' motion for directed verdict	194	147
Verdict	195	148
Motion for new trial and to set aside verdict	195	148
Opinion sur rule for new trial, Dickinson, J.	196	149
Stipulation waiving trial by jury	197	149
Opinion sur pleadings and proofs, Kirkpatrick, J.	198	150
Order sealing bill of exceptions	205	156
Præcipe for judgment	206	156
Judgment	207	157
Petition for appeal	207	157
Order allowing appeal	208	158
Plaintiff's assignments of error	209	158
Præcipe for transcript of record	211	159
Clerk's certificate (omitted in printing)	213	
Order extending time	214	160
Proceedings in U. S. C. C. A., Third Circuit	215	161
Motion to dismiss appeal and/or affirm judgment	215	161
Notice of motion to dismiss appeal and/or affirm judgment	219	164
Argument and submission	220	164
Opinion, Buffington, J.	221	165
Judgment	241	180
Petition for rehearing	242	181
Order denying rehearing	243	203
Clerk's certificate	244	203

	Original	Print
Stipulation as to exhibits	245	205
Order allowing certiorari	246	205

EXHIBITS.

Plaintiff's exhibit number:		
1—Copy of United States letters patent No. 1,314,867	1	206
4—Letter from Joseph Knafft to H. M. Fell, of the Eastman Kodak Company, dated June 21, 1918	6	212
5—Letter of H. M. Fell to Joseph Knafft, dated June 24, 1918	7	213
6—Letter to H. M. Fell from Joseph Knafft, dated July 2, 1918	8	214
7—Letter to Joseph Knafft from F. W. Lovejoy, of the Eastman Kodak Company, dated July 10, 1918	9	215
10—Letter from Cyrus Kehr to the Eastman Kodak Company, dated September 26, 1919	10	216
11—Letter to Cyrus Kehr from the patent attorney of the Eastman Kodak Company, dated October 6, 1919	11	217
12—Letter to Joseph Knafft from F. W. Lovejoy, dated December 2, 1919	12	218
13—Letter to C. B. Gray from A. K. Chapman, of the Eastman Kodak Company, dated October 31, 1923	14	220
36—Specification and list of parts for factory order No. 9435	16	222
37—Eastman Kodak drawing No. 14,511	17	223
38—Eastman Kodak drawing No. 23,791	18	224
39—Eastman Kodak drawing No. 9,507	19	225
40—Eastman Kodak drawing No. 15,131	20	226
41—Specification dated May 27, 1918	21	227
42—Specification dated March 14, 1920	22	228
43—Specification dated May 27, 1918 (original of Exhibit No. 41)	23	229
44—Eastman Kodak drawing No. 15,132	24	230
Defendants' exhibit No. 1—File wrapper, contents and drawings in matter of letters patent No. 1,314,867	24-A	231
Defendants' exhibit number:		
3—Eastman Kodak drawing No. 15,131	25	272
4—Eastman Kodak drawing No. 15,132	26	273
9—Specification bearing dates May 4, 1918; May 14, 1918, and May 21, 1918	27	274
10—Specification of Eastman Kodak Company (six sheets)	28	275
11—Letter to C. L. Jenks, signed J. A. Robertson, dated April 12, 1916	34	281
12—Letter to C. L. Jenks, signed J. A. Robertson, dated December 24, 1915	35	282
14—Letter dated December 12, 1917, to G. A. Riggs from R. L. Stinchfield	36	283

	Original	Print
16—Eastman Kodak Company drawing No. 9,511	38	287
17—X-ray photograph showing tip end of E. K. cable release	39	286
18—United States patent to Edwards No. 828,815	40	287
United States patent to Duryea No. 1,072,439	46	294
United States patent to Dakin & Underwood, No. 1,297,327	49	298
British patent to Watson & Edwards No. 13,157, of 1905	52	302
British patent to Edwards & Watson No. 15,643, of 1905	59	309
British patent to Edwards & Watson No. 5,741, of 1906	72	322
German patent to Wermann No. 147,372	82	332
Translation of specification of above German patent	84	334
Clerk's certificate (omitted in printing)	85	

[fols. a-1]

IN UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF PENNSYLVANIA, MARCH TERM, 1930.

No. 15306

CHARLES B. GRAY

v.

EASTMAN KODAK COMPANY, EASTMAN KODAK STORES, INC., EASTMAN KODAK COMPANY OF NEW YORK

Leon Edelson.
Ballard, Spahr, Andrews & Ingersoll.

DOCKET ENTRIES

Mar. 24, 1930. Præcipe to issue Summons filed.
Mar. 24, 1930. Summons exit—returnable 1st Monday in April, 1930.
Mar. 24, 1930. Statement of Claim filed.
Apr. 3, 1930. Summons returned; "on March 27, served each defendant" and filed.
Apr. 7, 1930. Notice to file Affidavit of Defense and proof of service filed.
May 5, 1930. Appearance of Pennie, Davis, Marvin and Edmonds, Esqs., and Ballard, Spahr, Andrews & Ingersoll, Esqs., for Eastman Kodak Stores, Inc., filed.
May 5, 1930. Eastman Kodak Stores, Inc., pleads Not Guilty with notice of special matters filed.

[fol. 2]

May 5, 1930. Motion by Eastman Kodak Company to quash summons; Affidavits in support thereof; and Order of Court granting rule to show cause why summons should not be quashed, etc., filed.
May 13, 1930. Answer to motion by Eastman Kodak Company to quash summons, etc., filed.
June 4, 1930. Petition for and Order of Court directing that defendants show cause why statement of claim should not be amended, filed.

June 5, 1930. Amendment to motion to quash summons and to set aside service as to Eastman Kodak Company, filed.

June 6, 1930. In open Court Rule to amend Statement of Claim allowed.

June 9, 1930. Præcipe to issue alias summons filed.

June 9, 1930. Alias summons exit—returnable 1st Monday in July, 1930.

June 9, 1930. Amended Statement of Claim filed.

June 9, 1930. Notice to file Affidavit of Defense filed.

June 11, 1930. Alias Summons returned: "on June 9, served Eastman Kodak Company of New York", and filed.

June 13, 1930. Plea of Not Guilty by Eastman Kodak Stores, Inc., filed.

June 13, 1930. Motion by Eastman Kodak Company (of New York) to quash summons and to set aside service filed.

June 13, 1930. Affidavits in re Motion by Eastman Kodak Company (of New York) to quash summons and to set aside service filed.

[fol. 3]

June 13, 1930. Order of Court granting rule to show cause why writ should not be quashed and service set aside as to Eastman Kodak Company of New York, filed.

June 19, 1930. Amendment to motion to quash summons and to set aside service as to Eastman Kodak Company (of New York), filed.

June 26, 1930. Deposition of L. B. Jones on behalf of defendant filed.

July 16, 1930. Argued sur motion to quash summons and set aside service thereof.

July 23, 1930. Opinion, Dickinson, J., discharging rules to set aside return of service filed.

July 30, 1930. Exception by Eastman Kodak Company (New York) to discharge of rule to quash summons and set aside service filed.

July 30, 1930. Exception by Eastman Kodak Company (New Jersey) to discharge of rule to quash summons and set aside service filed.

July 30, 1930. Order of Court disallowing exceptions by Eastman Kodak Company (New York) and (New Jersey) filed.

Aug. 12, 1930. Petition of Defendants for re-hearing filed.
Aug. 20, 1930. Answer to petition for re-hearing filed.
Aug. 20, 1930. Order directing that motion for re-hearing be argued, etc., filed.

[fol. 4]

Sept. 17, 1930. Argued sur motion for re-hearing.
Sept. 23, 1930. Opinion, Dickinson, J., discharging rule for re-argument filed.
Oct. 28, 1930. Præcipe to place case on trial list filed.
Feb. 19, 1931. Plea by Eastman Kodak Company (of New York) to statement of claim as amended filed.
Feb. 19, 1931. Plea by Eastman Kodak Company (of New Jersey) to statement of claim as amended filed.
Nov. 18, 1931. Jury called.
Dec. 10, 1931. Trial resumed.
Dec. 11, 1931. Trial resumed.
Dec. 12, 1931. Trial resumed.
Dec. 14, 1931. Verdict for plaintiff—damages assessed at $153,553.18.
Dec. 18, 1931. Motion for new trial and to set aside verdict filed.
Dec. 31, 1931. Additional reasons for new trial filed.
Jan. 9, 1932. Plaintiff's motion for judgment on the verdict and assessment of treble damages filed.
Jan. 13, 1932. Argued sur motion for new trial.
Jan. 20, 1932. Opinion, Dickinson, J., making absolute rule for new trial filed.
Feb. 11, 1932. Stipulation of counsel waiving trial by jury filed.
Mar. 17, 1932. Argued sur Pleadings and Proofs.
July 13, 1932. Deposition sur motion to quash summons and set aside service filed.

[fol. 5]

July 13, 1932. Opinion, Kirkpatrick, J., granting leave to enter judgment for defendants filed.
July 16, 1932. Præcipe to enter judgment filed.
July 16, 1932. Judgment in favor of defendants filed.
Aug. 2, 1932. Plaintiff's bill of exceptions sealed and filed.
Aug. 15, 1932. Assignments of Error filed.
Aug. 15, 1932. Petition for appeal filed.

Aug. 15, 1932. Order of Court allowing appeal filed.
Aug. 15, 1932. Bond for costs sur appeal, with surety, in $250 and order of court approving same filed.
Aug. 15, 1932. Citation allowed and issued.
Aug. 15, 1932. Copy of Notice of Appeal filed.
Aug. 17, 1932. Citation returned: "service accepted" and filed.
Aug. 17, 1932. Præcipe for transcript of record sur appeal filed.
Aug. 18, 1932. Notice of special matters of defense by Eastman Kodak Stores, Inc., filed.
Aug. 18, 1932. Further Notice of special matters of defense by Eastman Kodak Stores, Inc., filed.
Aug. 18, 1932. Further Notice of special matters of defense by Eastman Kodak Stores, Inc., filed.
Sept. 6, 1932. Transcript of record transmitted to counsel for plaintiff-appellant.
Sept. 12, 1932. Decree extending return day on Citation filed.
Oct. 11. 1932. Stipulation of counsel with regard to portions of testimony and as to certain exhibits, filed.

[fol. 6] IN UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF PENNSYLVANIA

[Title omitted]

STIPULATION AS TO RECORD

It is hereby stipulated and agreed by and between counsel for plaintiff and counsel for defendants in the above-entitled case that, except as hereinafter provided, the following portions of the stenographic notes of testimony need not be included as part of the record on appeal and are to be excluded from the printed record:

1. All of the matter commencing at line 15, page 65, to and including line 12, page 139, of the stenographic notes of testimony.

2. All of the matter included between line 8, page 180, and line 6, page 186, of the stenographic notes of testimony.

With the exception of Plaintiff's Exhibits Nos. 33, 34 and 35 and Defendants' Exhibit No. 2, all of the exhibits [fol. 7] referred to in the above portions of the stenographic notes of testimony shall be filed with the clerk of the Circuit Court of Appeals together with all other exhibits offered in evidence by the respective parties. With respect to plaintiff's said Exhibits Nos. 33, 34 and 35, and defendants' said Exhibit No. 2, the same are excluded from the record on appeal and shall not be filed with the clerk of the Circuit Court of Appeals.

Leon Edelson, Counsel for Plaintiff. Pennie, Davis, Marvin & Edmonds, Counsel for Defendants.

Dated September 30, 1932.

[fol. 8] IN UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF PENNSYLVANIA, MARCH TERM, 1930

No. 15,306

Action at Law for Infringement of Patent No. 1,314,867

CHARLES B. GRAY, Plaintiff,

v.

EASTMAN KODAK COMPANY and EASTMAN KODAK STORES, INC., Defendants

STATEMENT OF CLAIM—Filed March 24, 1930

Charles B. Gray, of Millbourne, in the County of Delaware, State of Pennsylvania, who is a citizen of said State of Pennsylvania and of the United States, complains of the Eastman Kodak Company and the Eastman Kodak Stores, Inc., defendants, of an action of trespass, and says:

1. That the defendant, Eastman Kodak Company, is a foreign corporation, created and organized under the laws of the State of New Jersey and that the defendant, Eastman Kodak Stores, Inc., is a corporation created and organized under the laws of the State of Pennsylvania, having its principal place of business in the City of Philadelphia, at 1020 Chestnut Streets, in said State of Pennsylvania.

[fol. 9] II. Plaintiff avers, on information and belief, that the defendant, Eastman Kodak Company, is the owner of at least a majority of the voting stock of defendant, Eastman Kodak Stores, Inc., and controls, governs and directs its policies and business; that Eastman Kodak Stores, Inc., is one of a number of subsidiary selling organizations wholly owned by the Eastman Kodak Company, and as such is an agent of the Eastman Kodak Company through which the latter sells and delivers cameras and appurtenant parts and accessories therefor; and that the Eastman Kodak Company now maintains and for some considerable time past has maintained, through said Eastman Kodak Stores, Inc., a regular and established place of business in the City of Philadelphia, Pennsylvania, where it carries a stock of Eastman Kodak cameras, parts therefor and various other photographic accessories all of which are manufactured by or for the defendant, Eastman Kodak Company, and which it sells and delivers to the public;

III. Plaintiff further avers, on information and belief, that defendant, Eastman Kodak Company, is and at all times herein mentioned has been engaged either in its own behalf or through its subsidiaries in the business of manufacturing cameras and other photographic equipment and accessories, and now is and has been selling the same throughout the United States; that as a part of its said business the Eastman Kodak Company maintains and conducts in the City and County of Philadelphia, State of Pennsylvania, the said Eastman Kodak Stores, Inc., as a branch establishment or agency for selling and trading in cameras and other photographic equipment and accessories; and that in order to so conduct its business the said Eastman Kodak Company wholly owns, controls and directs the policies and business of said Eastman Kodak Stores, Inc.;

[fol. 10] IV. That Charles B. Gray, plaintiff above mentioned, was a citizen of the United States before and at the time of his application for the letters patent hereinafter mentioned; that he was the true, original and first inventor of a certain new and useful invention in "Power Transmitting Mechanism," which is fully shown described and disclosed in the letters patent hereinafter referred to, and which invention relates more particularly to a mechanism for actuating the shutters of cameras; that the same was a

new and useful invention, was not known or used by others in this country, nor patented nor described in any printed publication in this or any foreign country prior to the application of the plaintiff for a patent therefor or before his invention thereof, nor had it been in public use or on sale in the United States more than two years prior to said application for letters patent, nor abandoned, nor was it proved to be abandoned;

V. That the said plaintiff, being as aforesaid the original and first inventor thereof, did, on the seventh day of February, 1918, file his application in the United States Patent Office for a patent therefor, and thereafter, to wit: on the second day of September, 1919, Letters Patent of the United States numbered 1,314,867, for said invention were issued by the Patent Office in due form of law and were delivered to the plaintiff in the name of the United States of America and under the seal of the Patent Office of the United States; and that under and by virtue of said letters patent there was granted to said Charles B. Gray, his heirs or assigns, for the term of seventeen years from the second day of September, 1919, the exclusive right to make, use and sell the said invention throughout the United States and the territories thereof; the aforesaid Letters Patent No. 1,314,867, or a duly certified copy thereof are ready in [fol. 11] court to be produced as and when this Honorable Court may direct, and a copy of said letters patent is attached hereto and made a part hereof;

VI. That the plaintiff has always been and now is the sole owner of all right, title and interest in, to and under the aforesaid Letters Patent No. 1,314,867, and of all rights of recovery thereunder;

VII. That, upon information and belief, the defendants herein, notwithstanding the premises aforesaid and having full knowledge thereof, and in violation of the exclusive rights and privileges secured to plaintiff by the aforesaid letters patent, and utterly disregarding the same, and contriving to injure and damage plaintiff and his said rights after the date of plaintiff's letters patent, and within six years prior to the commencement of this action, without the license or consent of plaintiff, or any license or authority whatsoever, in the State of Pennsylvania, and the eastern district thereof and elsewhere, have wrongfully made,

used and sold power transmitting mechanisms or cable releases containing and embracing the invention described, claimed and patented in and by the letters patent aforesaid and are now jointly infringing said letters patent within the district aforesaid and elsewhere by constructing or causing to be constructed, by using and causing to be used, and by selling and offering for sale, certain new and useful improvements in power transmitting mechanisms or cable releases constructed in accordance with and embodying the principles of the invention described and claimed in the plaintiff's letters patent;

VIII. That all of the aforesaid acts and doings of the defendants are unlawful, wrongful and injurious to the plain-
[fol. 12] tiff, and were done with intent to deprive plaintiff of the rights which he might and otherwise would, have derived from the sale of rights to make and use cable releases embodying said invention; that the defendants' acts and doings are contrary to the exclusive rights secured to plaintiff by the letters patent aforesaid, and in violation of the Statutes of the United States in such cases made and provided, whereby the plaintiff has been and is greatly injured and has been deprived of the large royalties which he might, and otherwise would have derived from the sale of rights to make and use such invention; and that the plaintiff has sustained actual damages thereby to the amount of $500,000;

IX. That plaintiff has given due and actual notice to the said defendants of his said letters patent and of the infringement herein complained of;

X. That plaintiff is informed, and therefore avers, that the said defendants are prepared and ready to continue such infringement, and that the defendant, Eastman Kodak Company, has declared its intention of so doing;

XI. That by force of the Statutes of the United States, the right of action has accrued to the said plaintiff to recover the said actual damages, and such additional amounts not exceeding in all three times the amount of such actual damages as the Court may see fit to adjudge and order, and plaintiff says that by reason of the willful and unjust infringement by said defendants, as herein set forth, that his said actual damages when assessed, should be increased to

a sum equal to three times the amount of said assessments, under the circumstances of said infringement.

[fol. 13] XII. That the defendants, though often requested so to do, have never paid said damages nor any part thereof, but have refused and still refuses to pay said damages.

Wherefore, plaintiff demands judgment for the sum of $1,500,000 against the defendants, and for the costs and disbursements of this case.

(Sgd.) Leon Edelson, Attorney for Plaintiff. White, Parry, Schnader & Maris; T. R. White, of Counsel.

Duly sworn to by Charles B. Gray. Jurat omitted in printing.

[fol. 14] IN UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF PENNSYLVANIA

[Title omitted]

STATEMENT OF CLAIM, AS AMENDED—Filed June 9, 1930

Charles B. Gray, of Millbourne, in the County of Delaware, State of Pennsylvania; who is a citizen of said State of Pennsylvania and of the United States complains of the Eastman Kodak Company, the Eastman Kodak Company of New York and the Eastman Kodak Stores, Inc., defendants, of an action of trespass, and says:

I. That the defendant, Eastman Kodak Company, is a foreign corporation, created and organized under the laws of the State of New Jersey; that the defendant, Eastman Kodak Company of New York, is a foreign corporation, created and organized under the laws of the State of New York, and that the defendant Eastman Kodak Stores, Inc., [fol. 15] is a foreign corporation created and organized under the laws of the State of New Jersey having its principal place of business in the City of Philadelphia; at 1020 Chestnut Streets, in said State of Pennsylvania;

II. Plaintiff avers, on information and belief, that the defendant, Eastman Kodak Company, now maintains and for some considerable time past has maintained, a regular and established place of business in the City of Philadel-

phia, Pennsylvania, where it carries a stock of Eastman Kodak cameras, parts therefor and various other photographic accessories, all of which are manufactured by or for the defendant, Eastman Kodak Company of New York, and for the benefit of the Eastman Kodak Company, and which it sells and delivers to the public, and where it has committed acts of infringement on account of which this suit is brought;

III. Plaintiff further avers, on information and belief, that defendant, Eastman Kodak Company of New York, is and at all times herein mentioned has been engaged either in its own behalf or through its subsidiaries, at Rochester, New York, and elsewhere, in the business of manufacturing cameras and other photographic equipment and accessories, and now is and has been selling the same throughout the United States; that as part of its said business the Eastman Kodak Company of New York maintains and conducts a regular and established place of business in the City and County of Philadelphia, State of Pennsylvania, for the purpose of selling and trading in cameras and other photographic equipment and accessories, and where it has committed acts of infringement on account of which this suit is brought;

[fol. 16] IV. That Charles B. Gray, plaintiff above mentioned, was a citizen of the United States before and at the time of his application for the letters patent hereinafter mentioned; that he was the true, original and first inventor of a certain new and useful invention in "Power Transmitting Mechanism," which is fully shown, described and disclosed in the letters patent hereinafter referred to, and which invention relates more particularly to a mechanism for actuating the shutters of cameras; that the same was a new and useful invention, and was not known or used by others in this country, nor patented nor described in any printed publication in this or any foreign country prior to the application of the plaintiff for a patent therefor or before his invention thereof nor had it been in public use or on sale in the United States more than two years prior to said application for letters patent, nor abandoned, nor was it proved to be abandoned;

V. That the said plaintiff, being as aforesaid the original and first inventor thereof, did, on the seventh day of Feb-

ruary, 1918, file his application in the United States Patent Office for a patent therefor, and thereafter, to wit; on the second day of September, 1919, Letters Patent of the United States numbered 1,314,867, for said invention were issued by the Patent Office in due form of law and were delivered to the plaintiff in the name of the United States of America and under the seal of the Patent Office of the United States; and that under and by virtue of said letters patent there was granted to said Charles B. Gray, his heirs or assigns, for the term of seventeen years from the second day of September, 1919, the exclusive right to make, use and sell the said invention throughout the United States and the Territories thereof; the aforesaid Letters Patent No. 1,314,867, or a duly certified copy thereof are ready in court to be produced as and when this Honorable Court [fol. 17] may direct, and a copy of said letters patent is attached hereto and made a part hereof;

VI. That the plaintiff has always been and now is the sole owner of all rights, title and interest in, to and under the aforesaid Letters Patent No. 1,314,867, and of all rights of recovery thereunder;

VII. That, upon information and belief, the defendants herein, notwithstanding the premises aforesaid and having full knowledge thereof, and in violation of the exclusive rights and privileges secured to plaintiff by the aforesaid letters patent, and utterly disregarding the same, and contriving to injure and damage plaintiff and his said rights after the date of plaintiff's letters patent, and within six years prior to the commencement of this action, without the license or consent of plaintiff, or any license or authority whatsoever, in the State of Pennsylvania, and the Eastern District thereof and elsewhere, have wrongfully made, used and sold power transmitting mechanisms or cable releases containing and embracing the invention described, claimed and patented in and by the letters patent aforesaid and are now jointly infringing said letters patent within the district aforesaid and elsewhere by constructing or causing to be constructed, by using and causing to be used, and by selling and offering for sale, certain new and useful improvements in power transmitting mechanisms or cable releases constructed in accordance with and embodying the principles of the invention described and claimed in the plaintiff's letters patent;

VIII. That all of the aforesaid acts and doings of the defendants are unlawful, wrongful and injurious to the plaintiff, and were done with intent to deprive plaintiff of [fol. 18] the rights which he might and otherwise would, have derived from the sale of rights to make and use cable releases embodying said invention; that the defendants' acts and doings are contrary to the exclusive rights secured to plaintiff by the letters patent aforesaid, and in violation of the Statutes of the United States in such cases made and provided, whereby the plaintiff has been and is greatly injured and has been deprived of the large royalties which he might, and otherwise would have derived from the sale of rights to make and use such invention; and that the plaintiff has sustained actual damages thereby to the amount of $500,000;

IX. That plaintiff has given due and actual notice to the said defendants of his said letters patent and of the infringement herein complained of;

X. That plaintiff is informed, and therefore avers, that the said defendants are prepared and ready to continue such infringement, and that the defendant Eastman Kodak Company, has declared its intention of so doing;

XI. That by force of the Statutes of the United States, the right of action has accrued to the said plaintiff to recover the said actual damages, and such additional amounts not exceeding in all three times the amount of such actual damages as the Court may see fit to adjudge and order, and plaintiff says that by reason of the willful and unjust infringement by said defendants, as herein set forth, that his said actual damages when assessed, should be increased to a sum equal to three times the amount of said assessments, under the circumstances of said infringement.

XII. That the defendants, though often requested so to do, have never paid said damages nor any part thereof, but [fol. 19] have refused and still refuse to pay said damages.

Wherefore, plaintiff demands judgment for the sum of $1,500,000 against the defendants, and for the costs and disbursements of this case.

(Sgd.) Leon Edelson, Attorney for Plaintiff. White, Parry, Schnader & Marris; T. R. White, of Counsel.

Duly sworn to by Charles B. Gray. Jurat omitted in printing.

[fol. 20] IN UNITED STATES DISTRICT COURT

NOTICE TO FILE AFFIDAVIT OF DEFENSE—Filed April 7, 1930

To the Above-mentioned Defendants:

You are required to file an affidavit of defense within fifteen days from the service hereof to the statement of claim filed in the above-entitled action and served upon you the twenty-seventh day of March, 1930.

(Sgd.) Leon Edelson, Attorney for Plaintiff.

STATE OF PENNSYLVANIA,
County of Philadelphia, ss:

Personally appeared before me, B. Suzette Kennedy, who, being duly sworn, deposes and says she is the secretary of Leon Edelson, attorney for the plaintiff in the above-entitled action and that she served a copy of the foregoing notice to file an affidavit of defense upon each of the above-named defendants, at twelve o'clock of the fourth day of April, 1930, by leaving a copy for each of said defendants at the office of the Eastman Kodak Stores, Inc., at 1020 Chestnut Street, in the City and County of Philadelphia, and State of Pennsylvania, in charge of Mary C. Kirkpatrick.

(Sgd.) B. Suzette Kennedy.

Sworn to and subscribed before me this fourth day of April, 1930. (Sgd.) Arthur Edward Dennis, Notary Public.

[fol. 21] IN UNITED STATES DISTRICT COURT

PLEA OF DEFENDANT, EASTMAN KODAK STORES, INC.—Filed May 5, 1930

Defendant, Eastman Kodak Stores, Inc., pleads not guilty, with notice of special matters.

(Sgd.) Pennie, Davis, Marvin & Edmonds, 165 Broadway, New York, N. Y.; Ballard, Spahr, Andrews & Ingersoll, 1035 Land Title Bldg., Phila., Pa., Attorneys for Eastman Kodak Stores, Inc.

IN UNITED STATES DISTRICT COURT

PLEA OF DEFENDANT, EASTMAN KODAK STORES, INC., TO STATEMENT OF CLAIM AS AMENDED—Filed June 13, 1930

Defendant, Eastman Kodak Stores, Inc., pleads not guilty, with notice of special matters.

(Sgd.) Pennie, Davis, Marvin & Edmonds, 165 Broadway, New York, N. Y.; Ballard, Spahr, Andrews & Ingersoll, 1035 Land Title Bldg., Phila., Pa., Attorneys for Eastman Kodak Stores, Inc.

[fol. 22] IN UNITED STATES DISTRICT COURT

NOTICE OF SPECIAL MATTERS OF DEFENSE BY DEFENDANT, EASTMAN KODAK STORES, INC.

Defendant, Eastman Kodak Stores, Inc., having pled the general issue hereby gives notice in writing to plaintiff's attorney that it shall prove on trial, any one or more of the following special matters:

1. That the invention or inventions purported to be patented by United States Patent No. 1,314,867 were patented or described in some printed publication prior to said Charles B. Gray's supposed invention or discovery thereof or more than two years prior to his application for a patent therefor, to wit, in the following patents and publications:

United States Patents:

Edwards, 828,815, August 14, 1906.
Edwards, 929,573, July 27, 1909.
Duryea, 1,072,439, Sept. 9, 1913.

British Patents:

Watson, 13,157, of 1905.
Edwards, 15,645, of 1906.
Edwards, 5,741, of 1906.

German Patents:

Wermann, 147,572, May 28, 1902.

and in others not now known to the defendant but of which it shall give due notice when ascertained.

2. That said Charles B. Gray was not the original and first inventor or discoverer of any material or substantial part of the thing patented, all material and substantial parts thereof having been known or used by others in this country before his supposed inventions or discovery [fol. 23] thereof, to wit, by the inventors of the following United States Patents residing at the places indicated in said patents:\

Edwards, 828,815, August 14, 1906.
Edwards, 929,573, July 27, 1909
Duryea, 1,072,439, Sept. 9, 1913.
Dakin & Underwood, 1,297,327, March 18, 1919, (Filed Oct. 15, 1917).

and by:

Eastman Kodak Company of Rochester, N. Y.,
Bausch & Lomb Optical Co. of Rochester, N. Y.,

all at Rochester, New York, and elsewhere in the United States and to and by others not now known to the defendant but of whom it shall give due notice when ascertained.

3. That the invention or inventions purported to be patented thereby were in public use or on sale in this country for more than two years before the plaintiff's application for patent therefor by Eastman Kodak Company of Rochester, New York, at Rochester, New York, and elsewhere in the United States, and by Bausch & Lomb Optical Co. of Rochester, New York, at Rochester, New York, and elsewhere in the United States, and by others not known to the defendant but of whom it shall give due notice when ascertained.

(Sgd.) Pennie, Davis, Marvin & Edmonds, 165 Broadway, New York, N. Y., Attorneys for Eastman Kodak Stores, Inc. George E. Middleton, of Counsel.

To Leon Edelson, Esq., 1505 Land Title Building, Philadelphia, Pa., Attorney for Charles B. Gray.

[fol. 24] Service of the above notice and receipt of a copy acknowledged this ninth day of September, 1930.

(Sgd.) Leon Edelson, 1505 Land Title Bldg., Philadelphia, Pa., Attorney for Charles B. Gray.

September 8, 1930.

IN UNITED STATES DISTRICT COURT

FURTHER NOTICE OF SPECIAL MATTERS OF DEFENSE BY DEFENDANT, EASTMAN KODAK STORES, INC.

Supplementing its notice of September 9, 1930, defendant, Eastman Kodak Stores, Inc., hereby adds to the names of those having prior knowledge or use, as set forth in paragraph 2 of said notice, the following:

E. E. Underwood, of Rochester, N. Y., at Rochester, N. Y.;

C. S. Naramore, of Rochester, N. Y., at Rochester, N. Y.;

A. K. Chapman, of Rochester, N. Y., at Rochester, N. Y.;

D. H. Stewart, of Rochester, N. Y., at Rochester, N. Y.;

W. H. Zimmer, of Rochester, N. Y., at Rochester, N. Y.;

August Krenzer, of Rochester, N. Y.; at Rochester, N. Y.;

L. B. Dodge, of Rochester, N. Y., at Rochester, N. Y.;

H. F. Hoefle, of Rochester, N. Y., at Rochester, N. Y.;

B. MacCallum, of Rochester, N. Y., at Rochester, N. Y.;

[fol. 25] Harold Bennett, of Rochester, N. Y., at Rochester, N. Y.;

Frank Sherman, of Rochester, N. Y., at Rochester, N. Y.

M. J. Frank, of New York, N. Y., at New York, N. Y.;

G. B. Ellestad, of Lanesboro, Minn., at Lanesboro, Minn.;

Louis Mandel, of Chicago, Ill., at Chicago, Ill.;

J. A. Robertson (deceased), formerly of Rochester, N. Y., at Rochester, N. Y.;

R. L. Stinchfield (deceased), formerly of Rochester, N. Y., at Rochester, N. Y.

(Sgd.) Pennie, Davis, Marvin & Edmonds, 165 Broadway, New York, N. Y., Attorneys for Eastman Kodak Stores, Inc. George E. Middleton, of Counsel.

To Leon Edelson, Esq., 1505 Land Title Building,, Philadelphia, Pa., Attorney for Charles B. Gray.

Service of the above notice and receipt of a copy acknowledged this — day of January, 1931.

(Sgd.) Leon Edelson, 1505 Land Title Bldg., Philadelphia, Pa., Attorney for Charles B. Gray.

January 28, 1931.

[fol. 26] IN UNITED STATES DISTRICT COURT

FURTHER NOTICE OF SPECIAL MATTERS OF DEFENSE

Supplementing notices of September 9, 1930, and January 29, 1931, defendants hereby add to the names of those having prior knowledge of use as set forth in paragraph 2 of the notice of September 9, 1930, the following:

Otto Hennig, of New York, N. Y., at New York, N. Y.,

and add to the list of patents and publications as set forth in paragraph 1 of said notice the following:

Catalogue No. 90 of Heinrich Ernemann, of Dresden, Germany, published October, 1904.

(Sgd.) Pennie, Davis, Marvin & Edmonds, Attorneys for Eastman Kodak Stores, Eastman Kodak Company and Eastman Kodak Company of New York (Appearing Specially for the Latter Two). George E. Middleton, of Counsel.

To Leon Edelson, Esq., Attorney for Charles B. Gray, 1505 Land Title Building, Philadelphia, Pa.

Services of the above notice and receipt of a copy acknowledged this ninth day of October, 1931.

(Sgd.) Leon Edelson, Attorney for Charles B. Gray.

[fol. 27] IN UNITED STATES DISTRICT COURT

PLEA OF DEFENDANT, EASTMAN KODAK COMPANY (OF NEW JERSEY), TO STATEMENT OF CLAIM AS AMENDED—Filed February 19, 1931

Defendant, Eastman Kodak Company (of New Jersey), pleads not guilty, with notice of special matters. Defendant also pleads to the jurisdiction of the Court that it has no regular and established place of business in said district.

(Sgd.) Pennie, Davis, Marvin & Edmonds, 165 Broadway, New York City; Ballard, Spahr, Andrews & Ingersoll, 1035 Land Title Bldg., Phila., Pa., Attorneys for Eastman Kodak Company (of New Jersey) Specially for the Purpose of Said Plea.

[fol. 28] IN UNITED STATES DISTRICT COURT

PLEA OF DEFENDANT, EASTMAN KODAK COMPANY (OF NEW YORK) TO STATEMENT OF CLAIM AS AMENDED—Filed Feb. 19, 1931

Defendant, Eastman Kodak Company (of New York), pleads not guilty, with notice of special matters. Defendant also pleads to the jurisdiction of the Court that it has no regular and established place of business in said district.

Pennie, Davis, Marvin & Edmonds, 165 Broadway, New York City; Ballard, Spahr, Andrews & Ingersoll, 1035 Land Title Bldg., Phila., Pa., Attorneys for Eastman Kodak Company (of New York) Specially for the Purpose of Said Plea.

[fol. 29] IN UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF PENNSYLVANIA, MARCH TERM, 1930

No. 15,306

Action at Law for Infringement of Patent No. 1,314,867

CHARLES B. GRAY, Plaintiff,

v.

EASTMAN KODAK COMPANY, EASTMAN KODAK COMPANY (OF NEW YORK) and EASTMAN KODAK STORES, INC., Defendants

Bill of Exceptions—Filed August 2, 1932

Be it remembered, That in the said term of this court came the said plaintiff into the said court, and impleaded the said defendants in a certain plea of trespass, etc., in which the said plaintiff declared (prout narr.) and the said defendants pleaded (prout pleas). And thereupon issue was joined between them.

And afterwards, to wit: at a session of said court, held at the district aforesaid, before the Honorable William H. Kirkpatrick, Judge of the said Court, on the seventeenth day of March, 1932, the aforesaid issue between the said parties came to be tried by the Court without a jury upon the record of the same case which had been previously tried before a jury and the Court the tenth to fourteenth days

inclusive of December, 1931, the issue between the said [fol. 30] parties having been tried by the Court without a jury on said seventeenth day of March, 1932, in accordance with a stipulation entered into by and between the attorneys for the respective parties, at which date, namely March 17, 1932, came as well the said plaintiff as the said defendants by their respective attorneys; and upon the trial the counsel for the respective parties offered their evidence as particularly set forth in the following stenographic notes of testimony and the stenographer's minutes attached hereto; and the evidence in the cause being closed the learned Trial Judge rendered his opinion and decision, in writing, as hereinafter set forth and as follows:

[fol. 31] PROCEEDINGS AT TRIAL

[Title omitted]

Before Dickinson, J., and a jury

Philadelphia, Pa., December 10, 1931.

APPEARANCES

Present: Thomas Raeburn White, Esq., Algernon R. Clapp, Esq., Leon Edelson, Esq., for plaintiff; William H. Davis, Esq., George E. Middleton, Esq., Boyd Lee Spahr, Esq., and Charles W. Riley, Esq., for defendants.

Mr. Davis: If the Court please, before we go on with the evidence, I am appearing here on behalf of the defendant, the Kodak Stores, and your Honor will recall that the defendants, the Kodak Company of New York, and the Kodak [fol. 32] Company of New Jersey, appeared specially and made a motion to quash the subpœna, and that was passed upon by the Court, and I am petitioning it now only to reserve the point for reconsideration by the Court and for the Court of Appeals.

The Court: Well, you may proceed.

(Mr. White opened for the plaintiffs. Mr. Davis opened for the defendants.)

The Court: Will you let me have a copy of the patent?

(Copy of patent handed to the Court.)

Mr. White: If your Honor please, we rely on Claims 1, 2, 3, 5 and 6.

I offer in evidence certain stipulations which have been agreed upon between counsel for plaintiff and defendants. The first one relates to certain jurisdictional facts.

I offer in evidence stipulation between counsel for plaintiff and defendants as follows:

STIPULATION AS TO CERTAIN FACTS

It is hereby stipulated and agreed:

1. That the plaintiff, Charles B. Gray, is a citizen of the United States and a resident of Millbourne, in the County of Delaware and State of Pennsylvania, and that Eastman Kodak Company is a corporation existing under the laws of the State of New Jersey and that Eastman Kodak Company (of New York) is a corporation existing under the laws of the State of New York.

2. That the plaintiff, Charles B. Gray, is now, and has been since the date of issue of said letters patent in suit, No. 1,314,867, the sole owner of said letters patent and of any and all claims for damages arising out of any and all infringements of said letters patent.

3. That at the trial of the above-entitled cause printed Patent Office copies or photostats of United States patents and printed or photostat copies of foreign patents may [fol. 33] be introduced and shall be received in evidence with the same force and effect as original letters patent or duly certified copies thereof, and that photostat copies of publications may be introduced and shall be received in evidence with the same force and effect as the originals, and that such publications were published on the respective dates they bear purporting to be the date of publication; all subject to correction by other proof.

4. That at the trial of the above-entitled cause plaintiff will rely upon Claims 1, 2, 3, 5 and 6 of the patent in suit, No. 1,314,867, and upon any other claim or claims provided plaintiff gives due notice thereof to defendant at least thirty days before trial.

5. That the defendant, Eastman Kodak Company (of New York) has manufactured and sold within the United States and within six years of the filing of the amended statement of claim herein cable releases like the samples attached to the stipulation of February 17, 1931, between attorneys for plaintiff and attorneys for Eastman Kodak Stores, Inc., and respectively identified as "Kodak Releases, types No. 2 and No. 26"; that in proof of infringement at the trial plaintiff will rely upon either or both of said type No. 2 and type No. 26 releases; and that if other releases are to be relied upon plaintiff will give defendant notice of such other releases and clearly identify them, at least thirty days before trial.

6. That the notices of special matters of defense given in writing by defendant, Eastman Kodak Stores, Inc., to plaintiff's attorney on September 9, 1930, and January 29, 1931, be considered as having been given likewise by defendants, Eastman Kodak Company and Eastman Kodak Company (of New York).

[fol. 34] I also offer a second stipulation, including somewhat the same averments as the first, and with certain other technical averments:

STIPULATION AS TO CERTAIN FACTS

It is hereby stipulated and agreed:

1. That the plaintiff, Charles B. Gray, is a citizen of the United States and a resident of Millbourne, in the County of Delaware and State of Pennsylvania, and that Eastman Kodak Stores, Inc., is a corporation existing under the laws of the State of New Jersey having a regular and established place of business in the City of Philadelphia and State of Pennsylvania.

2. That the plaintiff, Charles B. Gray, is now, and has been since the date of issue of said letters patent in suit, No. 1,314,867, the sole owner of said letters patent and of any and all claims for damages arising out of any and all infringements of said letters patent.

3. That at the trial of the above-entitled cause printed Patent Office copies or photostats of United States patents and printed or photostat copies of foreign patents may be

introduced and shall be received in evidence with the same force and effect as original letters patent or duly certified copies thereof, and that photostat copies of publications may be introduced and shall be received in evidence with the same force and effect as the originals, and that such publications were published on the respective dates they bear purporting to be the date of publication; all subject to correction by other proof.

4. That at the trial of the above-entitled cause plaintiff will rely upon Claims 1, 2, 3, 5 and 6 of the patent in suit, No. 1,314,867, and upon any other claim or claims provided plaintiff gives due notice thereof to defendant at least thirty days before trial.

[fol. 35] 5. That defendant, Eastman Kodak Stores, Inc., has sold in the Eastern District of Pennsylvania and within six years of the filing of the original statement of claim herein, cable releases like the samples attached hereto and respectively identified as Kodak releases types No. 2 and No. 26; that in proof of infringement at the trial plaintiff will rely upon either or both of said type No. 2 and type No. 26 releases; and that if other releases are to be relied upon plaintiff will give defendant notice of such other releases and clearly identify them, at least thirty days before trial.

I also offer in evidence the notice and supplemental notice given by the plaintiff to counsel for the defendants in connection with this case.

NOTICE AS TO RELEASES RELIED UPON

In accordance with the provisions of paragraph 5 of the stipulation executed February 17, 1931, and paragraph 5 of the stipulation executed October 3, 1931, by the attorneys for the plaintiff and the attorneys for the defendants in the above-entitled cause, notice is hereby given to each and all of said defendants that the plaintiff, in proof of infringement, at the trial will rely, in addition to the cable releases of the types identified in the aforesaid stipulations, upon a further cable release manufactured and sold by the defendants like the sample attached hereto and identified as "Kodak Release, type No. 29."

Leon Edelson, Attorney for Charles B. Gray, Plaintiff.

Dated October 6, 1931.

Service of the above notice is hereby acknowledged this tenth day of October, 1931.

Pennie, Davis, Marvin & Edmonds, Attorneys for Defendants.

[fol. 36] SUPPLEMENTAL NOTICE AS TO RELEASES RELIED UPON

In accordance with the provisions of paragraph 5 of the stipulation executed February 17, 1931, and paragraph 5 of the stipulation executed October 3, 1931, notice is hereby given to each and all of the above-named defendants in the above-entitled cause that the plaintiff, in proof of infringement, at the trial will rely upon all cable releases manufactured and/or sold by the defendants in which the inner thrust member is in the form of an incompressible spiral coil surrounded by an outer spiral coil the convolutions of which are open or in spaced relation and in which said outer coil is held in partially compressed condition by means of a substantially inextensible outer jacket of fabric material.

This supplemental notice is given in view of the fact that the defendants have manufactured and sold and are now manufacturing and selling cable releases embodying the constructional features set forth above and which are identified by type numbers other than those particularly specified in the aforesaid stipulations respectively executed February 17, 1931, and October 3, 1931.

Leon Edelson, Attorney for Charles B. Gray.

Dated October 23, 1931.

To Pennie, Davis, Marvin & Edmonds, Attorneys for the above-named defendants, 165 Broadway, New York, N. Y.

Service of the above notice and receipt of a copy thereof acknowledged this twenty-fourth day of October, 1931.

Pennie, Davis, Marvin & Edmonds, Attorneys for Defendants.

[fol. 37] CHARLES B. GRAY, sworn.

Direct examination.

By Mr. White:

Q. 1. Mr. Gray, where do you reside?

A. Millbourne, Delaware County, Pennsylvania.

Q. 2. What is your profession or business?

A. Experimental engineer and developing, manufacturing, some of my own inventions now.

Q. 3. You have been engaged in that professional work how long?

A. Well, for around twenty years.

Q. 4. You have made and manufactured a number of inventions?

A. I have manufactured a number of inventions, or at least one that is sold.

Mr. Davis: I object.

Mr. White: I do not know what he was going to say. I haven't asked him any question.

By Mr. White:

Q. 5. Mr. Gray, I show you letters patent.

The Court: What are you going to have him do? Describe his invention?

Mr. White: Yes.

The Court: Then suppose you let the jury have as many copies as you have of the patent, so that they can follow.

Mr. White: I will offer in evidence now, pursuant to the stipulation, a printed copy of the patent, Letters Patent No. 1,314,867, and I will hand the other two copies, which is all I have, to the jury, in case they wish to follow Mr. Gray's testimony.

(Printed copy of Letters Patent No. 1,314,867, marked as Plaintiff's Exhibit No. 1.)

[fol. 38] By Mr. White:

Q. 6. Mr. Gray, do you want to have a copy of the patent before you when you describe your invention?

A. Well, it is hardly necessary.

Q. 7. Suppose you tell the jury now what this invention of yours was and how it differed from other similar devices then in use.

Mr. Davis: I object to that, if the Court please. It seems to me that the patent itself shows that. It is not suggested that there is any obscurity in the patent or terms of the art that need explanation.

The Court: Do you lay down as a general proposition that these patents are self-displaying?

Mr. Davis: Certainly, in this case, I think there is no doubt that the patent explains itself, and, quite aside from the question whether it does or not, it seems to me that to call the inventor to state what his invention was and how it differed from other things, I feel quite sure, if your Honor please, that there is no question but what anyone can read this patent, anyone at all familiar with springs and wires can read this patent and understand what it explains there. I am sure the Court can.

Mr. White: Well, it may be very plain to Mr. Davis, who is a distinguished patent lawyer, and to the Court, who is familiar in such matters; but it is very hard for me to understand it, and ordinary people like the jury and myself, it is very difficult, I think, and it would really be helpful if Mr. Gray would explain in simple language what his invention is.

[fol. 39] The Court: Are you after a ruling?

Mr. Davis: Yes, sir; please.

(Question repeated by the stenographer.)

(Objection overruled. Exception noted for the defendants by direction of the Court.)

The Court: With the qualification, Mr. White, that you must restrict the witness not to what his invention was, but what his patented invention was.

By Mr. White:

Q. 8. Now understand, Mr. Gray, in describing your invention, you are describing what is covered by your letters patent which have just been offered in evidence. Do you understand what I mean?

A. Without the difference between the two?

Q. 9. No. That will come later. But just tell us what your invention was as described in this paper that has just been offered in evidence.

The Court: You invented something, and you patented it. Now we want you to tell the jury in as plain and simple language as you can what the invention is which you patented and which is described in your letters patent.

The Witness: The cable release which I perfected and invented consists of two heads, one hand piece and one attached to the camera, and between those two heads is a spring surrounded by a jacket, which limits those two heads at a certain distance apart, and holds them there, and inside of that head is a coil spring openly wound, so that it will, when it is bent this way or caught in the lid of the camera, while opening or closing—closing anyway—that it will spring—these springs will close when it is bent for any reason, these springs will close in instead of being bound.

[fol. 40] By Mr. White:

Q. 10. Do you wish to use these springs I hand you for illustration to the jury?

A. Yes. This fabric here represents the fabric which binds—that is around—this is only a section—that goes entirely around the spring. To make a flexible—this spring then is inside underneath this fabric. Here is the thing that limits the two heads at a given distance apart. Well, when this is bent, you see it closes up, it has room enough between the coils to close up on the inside. You see it closes up on the inside and opens on the outside, or remains the same distance on the outside, but closes on the inside; but that leaves the structure flexible. Then inside of this is another flexible coil for a thrust pin, which is free at one end and is bendable. It is a tightly wound coil. A tightly wound coil is flexible as long as one end is loose and not bound. As soon as it is bound it becomes stiff, like that. But this inner coil is flexible. It is a closely wound coil. But one end not being bound, remains flexible, and it can be bent. So, the entire mechanism can be bent in various directions without moving the camera in operation or injuring the inner or outer spring members for operation. In other words, if this inner member or the outer member becomes cramped——

The Court: Mr. White, if you will approach this subject from a different angle, I think you will be able to make it clearer to those of us who are not trained engineers, or mechanics. Now, suppose he tells us the state of the prior art upon which he thinks his invention was an improvement, and then ask him to explain wherein and how his improvement acted, and I think we will get it better.

Mr. White: Exactly.

[fol. 41] By Mr. White:

Q. 11. Mr. Gray, what did you start with in the form of a cable release then in use, when you began to make your experiments here?

The Court: Now, the prior art, that is what he is asking about. What was the prior art upon which you claim your invention was an improvement?

The Witness: May I have those samples?

Mr. White: You mean the ones you worked with?

The Witness: No; the ones that were in use at the time I made these improvements.

Mr. White: You mean these old ones that you had at that time?

The Witness: Yes, the old ones, the one with the wire. Now, here is a cable release that was in use at the time I invented and patented this flexible release.

By Mr. White:

Q. 12. You say it was in use. By what company was it manufactured?

A. It was manufactured by the Eastman Kodak Company. At least, it is marked that way.

Q. 13. You took that from an Eastman Kodak camera?

A. This is taken from one that had been used on a camera.

The Court: We are not interested in that, are we?

Mr. White: Except that it shows what he starts with.

The Court: No; we are inquiring about the prior art. Something was done in a certain way. This man made [fol. 42] what he thought was an improvement on it. Now, I think this jury will get a clearer idea if you tell them what was used beforehand and wherein he thinks his application is an improvement on the art.

Mr. White: I will ask *his* him to describe the structure of the cable release which I now offer in evidence.

(Cable release offered in evidence by Mr. White, labelled "EK used by Gray in early experiments. Closed coil casing and wire cable," designated as Plaintiff's Exhibit No. 2.)

The Court: He is talking about what he calls a cable. This is an improvement in the mechanism of a camera, is it?

Mr. White: That is right.

The Court: We all have some idea of what a camera is. What is that used for in a camera? What you call a cable? What is its use?

The Witness: This cable release takes the place of the old rubber tube and bulb. That is what it was to take the place of.

By Mr. White:

Q. 14. What is its purpose?

A. For opening and closing the lens and exposing the picture, exposing a film.

By the Court:

Q. 15. Let us see if we get that straight. That is under the mechanism of the original camera, when a man wanted to take a picture or stop taking a picture, he pressed the bulb; is that the idea?

A. When he wanted to expose a picture, he would press the bulb.

[fol. 43] Q. 16. What I mean to say is this: He is carrying his camera along, it is not taking any pictures; now, he sets it and sights an object, a picture of which he wants to take; now, in order to get what they call an exposure, he would press the bulb; is that the idea?

A. He presses a bulb, prior to this.

Q. 17. I am talking about in the first place.

A. Yes.

Q. 18. And I suppose that was pneumatic, was it, in its operation?

A. It was pneumatic.

Q. 19. All right; then there came a change, and instead of using a bulb and an air tube, he used what you call a cable?

A. A cable release.

Q. 20. And that is what you have in your hand?

A. That is what I have in my hand.

Q. 21. How does that operate differently from what the old squeezing of the bulb operated?

A. Well, it has two heads and a fabric and a closed spring, and then a wire cable for the plunger, running through that, and when that is pressed, that operates the lever on the camera, or the shutter of the camera, as did the pneumatic arrangement.

Q. 22. Well, now, tell me, is that operation mechanical or do you have a dry battery or something there? Is it electrical?

A. It is entirely mechanical.

Q. 23. Entirely mechanical?

A. Yes.

Q. 24. In other words, you really push open or shut or move your lever, which opens or shuts, is that it?

A. Well, when it is operated, it is supposed——

Mr. White: Referring to what?

The Court: Referring to the prior art.

[fol. 44] Mr. White: Plaintiff's Exhibit No. 2.

The Witness: When this operated to open or close the lens, open and close the lens, it is supposed to go forward and do that, and when you release it here it is supposed to come back. I found in this release that a slight kink in the outer coil or a slight kink in this would make it go forward and stay put, and the next operation that you wanted to make, why this was in that position, and you got no picture, you got no exposure, or if it was a time exposure, this thing would just stay up and keep the lens open. A camera is marked with different openings, time, bulb, and instantaneous. If it is instantaneous, it will go back, it will open and shut immediately with one operation. But if this thing is out of commission, which was the case at that time, it would go up and stay up, and the next exposure you undertook to make, this did not operate.

By the Court:

Q. 25. Mr Gray, really that acted as a sort of a plunger, did it?

A. Yes; it is a plunger.

Q. 26. Now, in order to act as a plunger, it had to have certain rigidity?

A. Yes.

Q. 27. It would have to have some rigidity or you could not push it?

A. Well, it slides—it is guided in this.

Q. 28. I understand, it would have to have. If it would double up the minute you put pressure on it, it would not slide, and it would not act as a plunger.

A. No, but then——

Q. 29. Now, the idea was that when you plunged it, the moment you released your pressure it would come back to its original position?

[fol. 45] A. It would come back.

Q. 30. If it worked as it was expected to work?

A. As it was expected to work.

Q. 31. But if it got a kink in it or anything else that would prevent that from acting as the plunger, then it would not come back immediately?

A. That is right.

Q. 32. And when it did not come back, the glass, we will call it, would remain exposed to the light?

A. Exposed to the light, or the next time you wanted to operate it, depending on which way you were using the camera, this would not open the lens, it would be stuck.

Q. 33. I think we have that clear. Now, wherein did your invention change that in what you thought was an improvement?

A. My invention consists of an open coil under this jacket which allows bending—can I have one of those, one of my releases? This invention here consists of an open coil on the outside and another spiral coil, a smaller spiral coil for the thrust member on the inside. When that is bent, you see it will go back to its normal position. You bend this the same way, and it stays bent. That is what stopped the working of this release.

Q. 34. Well, now, let us see if we understand that. Do you mean you put one coil inside another, so you had really two instead of one?

A. Two coils, yes.

Q. 35. Is that the idea?

A. Yes; two coils instead of a wire.

Q. 36. All right. We understand that.

A. And then this outer coil is spaced all along in one or two places, so that when it is bent it will go together inside of this——

[fol. 46] By Mr. White:

Q. 37. Illustrate to the Court by that larger spring.

A. Well, here is one—this is the jacket here, and this represents this section of the jacket. Well, when this is bent here, you see it does not bend, because it is bound between these two ends. You take this. This is my release. This is what was in the release in the prior art. This is what I found to work. You see, it is spaced coils with the same fabric over it, a section of the fabric, and that can be bent as freely as you want to.

By the Court:

Q. 38. Let us see if we get that, Mr. Gray. Then the difference between your spring coil and the spring coil of the prior art was that the convolutions of the coil were further apart in your application than in the other, is that it?

A. That is it.

Q. 39. All right; now we have that.

A. That enabled you——

Q. 40. Well, we can understand how it would affect the flexibility and resiliency of the coil; but that is the essential thing, that the convolutions were further apart in your idea than they were in the idea of the old art?

A. Well, the next—it is a combination of two things.

Q. 41. I understand, but that was one element?

A. That is one element.

By Mr. White:

Q. 42. Now what was the other element?

A. The other element was this coiled spring on the inside.

The Court: He has mentioned that, one element was really to have one coil within another coil.

[fol. 47] The Witness: Yes; inside of this cable. This cable will kink where the coil spring won't.

By Mr. White:

Q. 43. Mr. Gray, have you got one of your own releases there?

A. Yes.

Q. 44. What is this?

A. That is one of the prior art.

Mr. White: I offer in evidence cable release identified by the witness as "Old Eastman Kodak closed casing and wire cable."

(Cable release offered in evidence by Mr. White, designated as Plaintiff's Exhibit No. 3.)

The Court: Mr. White, may I ask you whether this coil within a coil is the same thing as described in claim 6, as a combination of two heads? Does that mean the same thing?

Mr. White: The combination of two heads is the two ends of the flexible tube.

The Court: That merely means the two ends then, does it?

Mr. White: Yes, that is it.

By Mr. White:

Q. 45. I understand, Mr. Gray, that you have explained the distinction between your invention and the prior art was that in your invention you had an open spring casing?

A. Yes, sir.

Q. 46. And the other was a closed spring casing with a wire intervening?

A. With a wire intervening. With a wire——

Q. 47. Plunger?

[fol. 48] A. Plunger.

Q. 48. Or an open spring casing with a wire plunger, did that exist in the prior art?

A. I didn't get that.

Q. 49. Did you find in the prior art an open spring casing but with a wire plunger?

A. I did.

Q. 50. You did?

A. Yes.

Q. 51. But not the combination of an open spring casing with a closed inner spring for a thrust member?

A. No, I didn't find that in the art.

Q. 52. That is correct, is it?

A. Yes.

Q. 53. Now, Mr. Gray, while your claims were going through the Patent Office, what if anything did you do with your invention in connection with the Eastman Kodak Company?

A. Well, I sent, through a friend of mine——

Mr. Davis: May I interrupt? I object. I do not see the purpose of that.

The Court: Nor I. State what you propose to prove.

Mr. White: I propose to prove that a sample of Mr. Gray's invention was sent to the Eastman Kodak Company, examined by them——

The Court: Before his patent was issued?

Mr. White: While his patent was being——

The Court: Before it was issued?

Mr. White: Before it was issued. And that after his patent was issued he went to them again and asked for proper consideration of his rights, which was refused.

[fol. 49] The Court: I do not know what you mean by proper consideration of his rights. I can understand that he disclosed to them what he claims his invention was. That may have some bearing on the question of infringement.

Mr. White: Yes, sir; and then he afterwards notified them that he considered they were infringing his patent, after it was granted. I am going to follow it up by proving that, but it seems to me very material to show that——

The Court: I grant you that you may show that there was a disclosure made to the one who is charged with infringement, of what the invention was. That may have a bearing, and a very important bearing, upon the question of whether or not they used that information.

Mr. White: That is it exactly.

The Court: And that would be infringement, if the patent was valid. I will permit that. Is it limited to that?

Mr. White: That is all at the moment, yes.

The Court: All right; I will permit that. I think that is proper.

Mr. Davis: May I say this, that Mr. White says that they subsequently sent a notice——

The Court: Well, I asked him now whether it was limited to the communicating of the essence of the invention to the alleged infringer. I think that may have some bearing on

the question of infringement. But beyond that I do not see that it has any relevancy. So go ahead.

Mr. Davis: I will withdraw the objection.

[fol. 50] Mr. White: I ask counsel for the other side if they will produce a letter from Joseph Knaffl to H. M. Fell, dated June 21, 1918.

Mr. Davis: Yes, sir, we have it here, and we will produce it. Do you want to go right ahead with your copy?

The Court: They say you may go ahead and use your copy. The letter will be produced.

By Mr. White:

Q. 54. Who is Joseph Knaffl, Mr. Gray?

A. He is a photographer in Knoxville, Tennessee.

Q. 55. He was a friend of yours?

A. A friend of mine.

Q. 56. You were living at Knoxville at that time?

A. Yes.

Mr. White: I offer in evidence letter from Joseph Knaffl to H. M. Fell, of the Eastman Kodak Company, at Rochester, New York, dated June 21, 1918.

(The letter referred to was marked as Plaintiff's Exhibit No. 4, and was read to the jury by Mr. White. It is copied into the record at page 89 stenographic Notes of Testimony.)

Mr. Davis: If the Court please I move to strike that out, because it does not disclose how Mr. Gray's device was made——

The Court: Oh, but I assume that is a mere step.

Mr. White: That is a mere step, yes.

Mr. Davis: You put it in as preliminary to what will come later?

Mr. White: Yes, that is all. I now offer in evidence the reply to the letter last mentioned.

[fol. 51] (Letter referred to designated as Plaintiff's Exhibit No. 5. Read to the jury by Mr. White. It is copied into the record at page 90, stenographic Notes of Testimony.)

The Court: Was that before or after the issuance of the patent?

Mr. White: Before the issuance, but while it was being considered by the Patent Office.

The Court: Evidently the writer of the letter thought that the patent had been issued.

Mr. White: He perhaps did. I call for a letter to Mr. Fell from Mr. Knafft of July 2, 1918.

(Letter produced in answer to the call.)

Mr. White: This is dated 7/2/18, to Mr. H. M. Fell, care of Eastman Kodak Company, Rochester, New York. I offer it in evidence.

(Letter referred to designated as Plaintiff's Exhibit No. 6. Read to the jury by Mr. White. It is copied into the record at page 91, stenographic Notes of Testimony.)

By Mr. White:

Q. 57. Mr. Gray, did you send a cable release as stated in that letter?

A. We did, through Mr. Knafft.

Q. 58. One of your inventions?

A. Yes.

Mr. White: I offer in evidence letter from the Eastman Kodak Company, by F. W. Lovejoy, dated July 10, 1918.

(Letter referred to designated as Plaintiff's Exhibit No. 7. Read to the jury by Mr. White. It is copied into the record at page 91, stenographic Notes of Testimony.)

By Mr. White:

Q. 59. Have you got the box in which the cable release was sent back to you?

[fol. 52] A. That was sent to Mr. Knafft.

(Box produced by the witness.)

By Mr. White:

Q. 60. And does that box contain the cable release which they returned to you and also the one which they sent you?

A. It does.

Q. 61. Has it been in your possession ever since it was received?

A. It has.

Q. 62. I show you a cable release taken from this box and which appears to have had the cover removed from a portion of it. What cable release is that?

A. That is the one that I sent through Mr. Knaffl.

Q. 63. That is the one you sent?

A. Yes.

Q. 64. What condition was it in when you sent it?

A. Well, it was as it is, except that the cover was not separated.

Q. 65. In other words, the cover was taken off by them in order to examine it?

A. The cover was evidently slitted to see what was in the inside, to see the construction.

Q. 66. Now I show you also the other release contained in this box and ask you if that is the one that was sent you by the company at that time.

A. It is.

Q. 67. And which Mr. Lovejoy stated was identical or substantially so with yours?

A. It is the same one.

Q. 68. Will you explain the structure of that cable release and explain to the jury whether it is like yours?

A. Well, this cable release has some of the same elements in it that mine does, but it still has this stiffness, and it has the closed spring on the outside under this jacket. It has the same coil spring in the inside as mine for the thrust member.

[fol. 53] Q. 69. In other words, it has a closed coil spring on the outside?

A. A closed coil spring on the outside and a closed coil spring on the inside for a thrust bearing.

Q. 70. How does yours differ from that?

A. Mine differs from this in that it has a closed coil spring on the outside. When it is bent——

Q. 71. You mean open?

A. Open coil spring on the outside. When it is bent it will—shall I bend this completely?

Q. 72. Whatever you like.

A. Now you see that is—when that is bent like mine will bend it is out of—it is distorted here, and it gets a little more of that and you can't use it at all. Could I take that one of mine again?

Q. 73. Yes.

A. The one that is being manufactured.

Q. 74. Oh, you mean the one they are making now?
A. The one they are making.

The Court: Do I understand the witness to go so far as to say that the difference between what we will call the Eastman coil which was sent to him and his coil that he sent to the Eastman Company consisted in the fact that the outside coil, the convolutions of the outside coil, were further apart than they were on the inside coil and than they were on the Eastman coil, so that they would be more flexible and bend without injury to the bar or whatever you call it?

Mr. White: That is nearly right, but I might just correct it by saying that the outside coil on the Eastman cable release is not open at all, it is what we call a closed spring. The convolutions are closed; that is correct?

The Witness: That is why that is offset.

[fol. 54] By the Court:

Q. 75. But what I want to get is, Mr. Gray, do we understand you correctly that that is the only difference, essentially, of course?

A. That is the only difference.

Q. 76. That is the only difference?

A. The only difference. That permits, if the coils are bent, these coils will come together on the inside, they will come together on the inside and you do not have this stiffness.

Q. 77. We understand what the advantage of it is, but if, for the Eastman outside coil there had been substituted one of your type of coils with the convolutions further apart, then yours and theirs would have been the same, is that it?

A. Would have been the same.

By Mr. White:

Q. 78. Now, you said you wanted to see one of the new Eastman releases which are exactly like yours.

A. I just want to illustrate the difference, what will happen if you bend mine closely, and what happens to this one. You see this one has no permanent set to it. This one I can show you again.

Mr. Davis: You better identify what this one is.

The Witness: The one that the Eastman Kodak sent me, saying that it was similar to mine. Now, I am bending that again. You see it is resistant now. It has got two kinks in it.. Try this in another place.

By Mr. White:

Q. 79. Now, the other that you have in your hand is an Eastman Kodak cable release as now manufactured, and which you claim to be an infringing device?

[fol. 55] A. Yes; this is my release manufactured by the Eastman Kodak Company. Now that is bent the same way.

Q. 80. And it does not leave the kink?

A. It doesn't leave a kink to obstruct the working of the camera.

Q. 81. That is the one that came back to you, isn't it?

A. Yes, that is the one that came back to me, the one that is kinked.

Q. 82. What is this newspaper piece in here? Has that got anything to do with it?

A. Let me see it.

Mr. White: No; that has nothing to do with it. I offer in evidence the box received by mail by Mr. Knafft, addressed to Mr. Knafft from the Eastman Kodak Company, with the two releases contained therein as stated by the witness, one the release which he sent to that company and the other the cable release which they then sent to him.

(Box referred to, with contents, marked as Plaintiff's Exhibit No. 8.)

By Mr. White:

Q. 83. Now, Mr. Gray, when did you discover that the Eastman Kodak Company had again changed their method, their type of cable release, and were using the type disclosed by you in your patent?

A. Well, it was a year or more after, to the best of my recollection, it was a year or more after I had sent this sample to them.

Q. 84. How did you ascertain it?

The Court: Mr. White, will you give me the date of that correspondence?

Mr. White: The first letter was June 21, 1918.

[fol. 56] The Court: Then that was after your patent application?

Mr. White: Yes.

The Court: But before the patent was granted?

Mr. White: That is right.

(Question repeated by the stenographer.)

The Witness: Will you state that again?

By Mr. White:

Q. 85. How did you find out that they were using your type of cable release?

A. I could purchase it from the dealers.

Q. 86. Purchased an Eastman Kodak camera?

A. From the dealers.

Q. 87. And examined the release?

A. I could purchase those and replace them on the camera.

By the Court:

Q. 88. Now, Mr. Gray, several times we have reminded you that it is important not only that you testify but it is equally important that the jury hear your testimony. They cannot hear you.

A. May I repeat that then? I could purchase these from the dealers in my part of the country. That is where I was located at that time. That is where I discovered that my release was being used.

By Mr. White:

Q. 89. How was the release that you then purchased, say a year or two—you don't remember the exact date—after this exchange of letters, and the release manufactured and sold by the defendants at the present day, which are the same, as I understand it—what was their structure? How did it compare with yours?

[fol. 57] A. Please state that again. I didn't get it.

Q. 90. Describe the structure of the release now manufactured by defendant company, as per sample which I now show you.

The Court: That is the alleged infringing structure, I assume?

Mr. White: Yes, the infringing structure.

The Court: All right. Tell the jury what that is.

Mr. White: That is Eastman Kodak No. 2 release.

The Witness: This release is what is contained in my patent, with an open outer coil and a closed inner coil, which gives it a flexibility and keeps it from kinking. You will note that this inner coil here, this closed coil, is free at one end, which will always leave it—I mean it is not bound in any way at one end, which leaves it flexible. The closed coil is flexible until you bind it between two ends. Well, this release here has the open coils like that, and when they are bent, they can slide inside the fabric casing, and that makes it flexible, leaves it flexible, whereas if it is bound between these two heads, as this section fabric is, when you undertake to bend it, it is stiffened.

By Mr. White:

Q. 91. The cable release which you hold in your hand is the one which is known as No. 2, is it not, by the defendant company?

A. Yes.

Q. 92. Stamped on the end?

A. Stamped on the end.

Mr. White: I will offer this in evidence as part of the witness's testimony.

[fol. 58] (Cable release referred to designated as Plaintiff's Exhibit No. 9, labeled "EK No. 2, infringing Gray's patent.")

By Mr. White:

Q. 93. Is that the same structure which you observed when you first discovered that——

A. That is the same structure, yes.

Q. 94—discovered that they were infringing?

A. Yes.

Q. 95. Now, Mr. Gray, your patent was granted on December 2, 1919. Did you take up with the defendant company, did you notify them that they were infringing on your rights?

A. Yes.

Q. 96. First through Mr. Knafft?

Mr. Davis: Does it make any difference?

Mr. White: No, it doesn't make any difference. I just wanted to clear it up.

Counsel for defendants produce a letter by an attorney at Knoxville, Cyrus Kerr. Was he representing you at that time?

The Witness: He was representing me, yes.

Mr. White: I offer this in evidence.

(Letter from Cyrus Kerr to Eastman Kodak Company dated Knoxville, Tennessee, September 26, 1919, designated as Plaintiff's Exhibit No. 10. Read to the jury by Mr. White. It is copied into the record at page 93, stenographic Notes of Testimony.).

Mr. White: I offer in evidence the answer of the patent attorney representing the Eastman Kodak Company, October 6, 1919, addressed to Mr. Cyrus Kerr, 607 Empire Building, Knoxville, Tennessee.

[fol. 59] (Letter referred to designated as Plaintiff's Exhibit No. 11. Read to the jury by Mr. White. Copied into the record at page 94, stenographic Notes of Testimony.)

Mr. White: I offer in evidence a letter from F. W. Lovejoy, vice-president of the Eastman Kodak Company, Rochester, New York, December 2, 1919, to Mr. Joseph Knaffl.

(Letter referred to designated as Plaintiff's Exhibit No. 12. Read to the jury by Mr. White. Copies into the record at page 98, stenographic Notes of Testimony.)

By Mr. White:

Q. 97. Mr. Gray, having received that letter, did you call in person at the office of the Eastman Kodak Company and discuss this matter with them?

A. I did.

Q. 98. About when was that?

A. It was in 1923.

Q. 99. You at that time notified them that they were infringing your patent?

A. I notified them that they were infringing the patent.

Q. 100. You received a letter a few days after your visit from the Eastman Kodak Company, did you not?

A. Yes, I received a letter.

Mr. White: I offer in evidence letter from the Eastman Kodak Company, A. K. Chapman, dated October 31, 1923, addressed to Mr. C. B. Gray, Box 596, Philadelphia, Pa.

(Letter referred to designated as Plaintiff's Exhibit No. 13. Read to the jury by Mr. White. Copied into the record at page 98, stenographic Notes of Testimony.)

[fol. 60] By Mr. White:

Q. 101. Mr. Gray, were you informed by the defendant company, or have you at any time seen any combination in the former art like yours?

A. Not before I sent this to them, not before I sent this to the Eastman Kodak Company.

Q. 102. I mean before your invention.

A. No.

Q. 103. They say in this letter that the closed coil outer casing and the open coil outer casing were known to them, and the inner thrust member coil?

A. Well, can I explain why that is?

Q. 104. Yes.

A. They have an open coil spring on the outside, in some of the patents, where they have the wire inner member, wire thrust member. That combination will kink, because the inner member will kink and hold the outer space coil kinked. So, it takes the combination of the two, of the coil spring on the inside and the open coils outside, to make a non-kinkable apparatus.

Q. 105. And that combination they did not claim they had?

A. They did not claim they had.

Mr. Davis: I object to that.

(Last question and answer repeated by the stenographer.)

The Court: That is a construction put on the letter, isn't it?

Mr. White: Well, he saw them personally and talked it over.

The Court: If they specifically denied the former use, prior use of that combination, all right; but your question, I would assume, was nothing more than a construction of their letter.

Mr. White: That is what it really is, yes, sir.

[fol. 61] The Court: Well, I do not think you can construe the letter. I will grant the motion to strike out the last question and answer.

Now, if I were on the jury, I would like to have explained to me why, if one construction of one of these plungers will kink in use because of the consequence of bending it, how you get rid of that by putting a more flexible tube, I will call it, on the outside. You make the same bending, and how does putting another coil with convolutions further apart affect the bending of the inside one?

The Witness: The inside coil is not bound. It is free at one end. It is free at one end and it is like this. Here is a closed coil. That is very flexible, anyway you want to—except when you bind it like this in the cable release. Now here is the construction with the open coil, which is flexible, and the other flexes with it.

Mr. White: Explain why it is flexible.

The Witness: It is flexible because these coils come together.

The Court: That part is clear enough. It is flexible because the coil convolutions are further apart.

The Witness: And they will come together——

The Court: What I have in mind is this. You have a cable of the description given. Now, the difficulty about it is that when it is bent it will kink, and in that way become so disordered as not to operate properly, that is not to operate the camera properly. We can all understand that. We can all understand, I think, easily why you take a cable, a coil, the convolutions of which are further apart, how that will be more flexible and less liable to injury; but how [fol. 62] does the putting of the first one inside the second one affect the operation of the first one? Apparently it would be bent in the same way and operated in the same way, subjected to precisely the same influences. Now why are the results different?

Mr. White: Can you explain that, Mr. Gray?

The Witness: If I understand his question, it is why is it that, by putting a coil spring,—let me get the question right first.

The Court: Let me explain it to you, Mr. Gray. As I gather it,—perhaps I have not the right idea,—now, you have a bar; it is flexible except under one condition, and it

operates all right except that it may get kinked. Now that is your trouble, isn't it?

The Witness: It does get kinked.

The Court: All right; it does get kinked; now, you put that bar inside this flexible coil with convolutions far apart. Now, it is the same bar that you had before, and the only difference is it is inside this coil. Now, why does the putting of it inside that coil make it work differently from what it would work were it not inside it? Does that make it clear to you?

The Witness: I am a little foggy.

The Court: Well, no doubt it is my fault.

Mr. White: Maybe I can ask him a question that will bring that out.

The Court: Suppose you explain it. I will take you for an expert.

Mr. White: I can not take that honor, but I will try to explain it.

[fol. 63] The Court: First I want to know, is it the right idea that in this new invention one of the elements which differentiate it from the old, or one of the improvements that the inventor regards in it, is this element that the bar is inside this more flexible coil? Is that right?

Mr. White: No, that is not quite right, sir. The new element in this is a combination of the open coil outer spring casing and a closed coil inner thrust member. That is the new thing, in that combination. Both of the elements were old. That is to say, an open spring as an outer casing was known, but a wire was put through, and that was not satisfactory, because a wire is not very flexible. Also, a closed coil outer member, such as Mr. Gray illustrated, that was known; and just before he made his invention the Eastman Kodak Company brought out a cable release with an outer closed spring and an inner closed spring, two springs; but the outer was a closed spring. And then the final step in the matter was the combination of the outer open spring with the closed inner spring. Now that is the thing we claim, that combination.

The Court: To my mind it means this. In principle and substance you have a tube with a piston in it.

Mr. White: Yes.

The Court: But you want it to be flexible.

Mr. White: Yes.

The Court: And you construct it accordingly. In the old days it was of rubber, a rubber tube.

Mr. White: Yes.

The Court: Now, there was a difficulty about it; of course, the rubber would degenerate.

[fol. 64] Mr. White: Yes, that is right.

The Court: And somebody substituted these metal bars instead of the rubber tubes. That we can understand. Now, when you got the metal bars, they operated all right except that they might kink in the use.

Mr. White: That is it.

The Court: And when they kinked, that would interfere with the shutter of the camera and play the kind of havoc that we can easily understand it would play. Now, that was its difficulty. In order to obviate that, they put around that closed bar, as you call it, this other more flexible bar. Is that the right idea of what was done?

Mr. White. Yes, that was what was done.

The Court: All right. What I would like to know is how the putting of that closed bar inside another tube, we will call it, affects or changes in any way the results of bending the inside bar.

Mr. White: Well, you see, the inside thrust member itself is a coiled spring, and therefore is flexible, and is not subject to be kinked, as a wire would be.

The Court: Yes.

Mr. White: Now, it must operate through some kind of a tube, and it must operate through a flexible tube, and if you have a tube which is bound by fabric, which is a closed coil spring, it is not flexible enough, and Mr. Gray's contribution to the art was to use the two in combination, to wit, an open coiled spring for the outer or outside of the tube, covered by a fabric, and in the inner side a thrust member consisting of a closed coiled spring, smaller of course, so it would go through.

[fol. 65] The Court: That is perfectly clear to my mind, but it does not answer the question that I have in my mind. Why is it? Let me illustrate it in this way. I have a tube, we will say, of rubber.

Mr. White: Yes.

The Court: And I want it to be flexible, but in flexing it there is danger that it will kink up.

Mr. White: Yes.

The Court: So that it will not operate. That often happens, certainly. Now, I want to stop that, so I get a larger tube and I run the smaller one through the larger one and the smaller one then is encased within a larger one. How does the putting of the kinky tube into the outer tube prevent it from kinking?

Mr. White: If the Court please, this is the reason. I see what you mean. The closed coil spring, when it is used as an inner thrust bearing, is not bound or confined as it is when it has an outer casing. The outer casing is just as Mr. Gray has illustrated here.

The Court: That is what I assume.

Mr. White: Now, when you use it on the inside it is used as a thrust member, but it is not bound, it can move endwise; in fact, its very purpose is to move endwise; therefore when you bend it it is flexible, as this is when bent out like that.

The Court: I assumed that was the explanation, but the net result is that if you do have the two in operation, according to your theory, the net result is that you obviate this tendency to kink with the inner bar.

Mr. White: That is it; and the best evidence of it is that the defendants are using it.

The Court: All right.

[fol. 66] Cross-examination.

By Mr. Davis:

X Q. 106. Mr. Gray, I understand you to say that the release that was sent back to you from the Eastman Kodak Company just after you sent to them your release was exactly like yours except that it had a tightly wound outer casing where yours had a loosely wound outer casing.

A. It is like mine outside of that.

X Q. 107. That is the Eastman device that they sent back to you had the thrust member, as you call it, which was a tightly coiled instead of a straight wire?

A. Yes.

X Q. 108. And I understood you to say also that you knew at that time that releases of this character had been made in which they used a straight wire for the thrust member and a loosely coiled casing around that straight wire?

A. I knew that.

Mr. White: If you wish to explain, you can, Mr. Gray.

The Witness: I wish to explain my answer on the difference between those, the one they sent me and what I sent back. This cable that they sent back,—said was what they were making,—what you saw me double up just now, the outer coil being closely wound, as you see there bent,—kept it permanent set. When they couldn't go no further, this coil is offset like that (indicating). That is what makes a permanent set.

By the Court:

Q. 109. What I understood, Mr. Gray, that the only difference between the release you sent to them and that which they returned to you as the one they had been using—the only difference between the two existed in the fact that the [fol. 67] outside coil had convolutions that were far apart in yours, and in theirs the convolutions were close together.

A. That is the only difference.

By Mr. Davis:

X Q. 110. At that time you knew that other releases had been made with an open coil at the casing?

A. I knew that there was an open coil——

X Q. 111. You just illustrated to the jury how it is that if the outer casing has open coils it can bend easily. You knew at that time that these releases with your open coil casing had been made before you did any work?

A. They all had—the wire cable, stranded wire cable, which was very susceptible to bend—when that bent, it would keep the open coils in a distorted condition.

X Q. 112. That was a defect of the straight wire?

A. That was a defect of the combination.

X Q. 113. The kinking was in the straight wire?

A. In that combination.

X Q. 114. Was the kinking in the straight wire?

A. Where the coils were wound open, it was in the wire.

X Q. 115. Suppose you had a wire inside of the closely coiled casing, as in the earliest of the Camera Company's releases, would those kink?

A. Then both the outer and inner coil would kink.

X Q. 116. This device that the Eastman Company sent back to you, with the close coil thrust member on the in-

side, that thrust member would not kink—that would not kink?

A. Unless the distortion was such—it was carried beyond the ordinary kink, which is possible.

X Q. 117. Do you recall making this application for patent, filing it in the Patent Office?

[fol. 68] A. Yes, sir.

X Q. 118. Do you recall whether or not when you filed that in the Patent Office, you then claimed that your invention consisted of the combination of an open coil outer casing, with a closed coil thrust member?

A. I do.

X Q. 119. Do you recall that the Patent Office said to you at that time that combination was not patentable?

A. I have the patent with that feature.

X Q. 120. Have you any recollection, Mr. Gray, about the Patent Office saying to you that certain claims that you had made in your patent application were not patentable?

A. I have no remembrance of that feature—that principle feature being rejected.

X Q. 121. I am going to ask you, Mr. Gray, to look at this copy of the papers that were filed in the Patent Office, and refer to what is called claim 17. That is one of the claims that you had before the Patent Office as being of your invention at the time the application was filed; is that right?

The Court: That is your original application.

The Witness: I am looking at it to see what I can find.

By Mr. Davis:

X Q. 122. Shall we look at it together, element by element, Mr. Gray?

A. All right.

X Q. 123. It starts out with these words: "In a mechanism of the nature described"—that meant in one of these cable release structures; is that right?

A. That meant my cable release.

X Q. 124. Then the language is: "The combination of two heads." That was the head at one end attached [fol. 69] to the camera, and the head at the other end, that is part of the push button, as you explained this morning?

A. That is right.

X Q. 125. The claim says: "A coiled spring wire tube, having spaced coils, being located between said heads." What member is that?

A. That is the outer coil.

X Q. 126. That is the open coil outer casing?

A. Yes, sir.

X Q. 127. It goes on: "flexible means joining said heads and definitely holding them at a fixed distance from each other until said spring wire tube is partially compressed endwise." What part is that?

A. That is the fabric cover, which this is a section of.

X Q. 128. The claim goes on: "A stem extending slidably through one of said heads, having limited outward movement." What is that?

A. That is the push button here.

X Q. 129. Then the next element is: "A slide member in the other of said heads." What is that slide member—is that the little plunger——

A. The little plunger, the little metal piece on the end of the flexible wire connection.

X Q. 130. That is on the end of the release which is attached to the camera—it is the little plunger on the end of the release that is attached to the camera?

A. At the end; not on the end, but at the end. It is fastened to the inner thrust member.

X Q. 131. The next element in that claim: "Coiled wire tube, means intervening and joined to said stem and said slide member for the transmission of endwise motion on said stem to said slide member," substantially described. What was that final element, "coiled wire tube"?

A. That is the thrust member. That is the connection of the thrust member between the——

[fol. 70] X Q. 132. You answered it, that the coiled wire tube is your coil inside the thrust member?

A. Yes, sir.

X Q. 133. So that you there presented to the Patent Office a claim for a device which had in combination an open wire casing and a coiled wire tube or thrust member?

A. That is right.

X Q. 134. Do you recall that the Patent Office authority, the examiner in the Patent Office who makes examinations

to see whether things claimed there are patentable or not—do you recall that he wrote a letter to you or to your lawyer, in which he rejected that claim and said it was not patentable?

A. I do not recall that. That is in my patent.

X Q. 135. I am going to direct your attention to this document which is a copy of a communication to your attorney from the Patent Office, under date of February 25, 1918. I show you the sentence beginning at the bottom of that page, and I recall to you that the claim that you presented to the Patent Office was claim No. 17. The examiner said to you in that letter: "Claims 17 to 22 inclusive are rejected on the British patent to Edwards cited. To construct the transmission element of a coiled wire tube is not patentable, in view of German to Wermann, 147,572 of June 23, 1904,"—that is the number of the patent. Did you understand when the examiner wrote that letter to you, did you understand what he meant when he said, "to construct the transmission element of the coiled wire tube is not patentable"?

Mr. White: I do not like to object, but I do not see the relevany of this question. It seems to me to be interminable. The Patent Office passed finally on this and the claims were allowed.

The Court: To my mind it is quite important. That is to say, he has testified to what the inventive thought was [fol. 71] in the patent issued to him. He has spoken of certain elements and a combination of certain elements. Counsel is calling his attention to that and asking him whether or not in his original application he did not present as a patentable thought the inventive idea embodied in that combination. He is asking him whether or not he was presenting that very combination to the Patent Office, and as I understand the witness he said, "Yes, I did." Now he is calling his attention to the fact, "Was not that the very combination which the Patent Office threw out as not patentable under the British and German patents"?

Mr. White: What may have happened while the case was going through the office is not material.

The Court: If the Patent Examiner subsequently changed his mind and allowed the claim which he at first rejected, that is a complete answer to it, but counsel may call the at-

tention of the witness to the fact that the Patent Office did at least at first reject that claim.

Mr. White: I have no objection, except I feel it would be interminable.

The Witness: May I answer that?

The Court: Certainly.

The Witness: It is a very common thing to have a claim rejected and finally allowed.

Mr. Davis: I object to that.

The Court: That is a proper answer, but it is not a direct answer. He asked you whether or not you did not understand, first, that you had made an application to the Patent Office for a patent on the very combination which counsel [fol. 72] has described to you, and I understood you to say, "Yes, I did ask for a patent for that very inventive thought"; is that right?

The Witness: Yes, sir.

By the Court:

Q. 136. He asked you, weren't you aware that the examiner in the Patent Office rejected the patentability of that very combination—you were or you were not. You say it is a very common thing for them to reject claims and then afterwards allow them. We will assume that is true. But, did you understand that the examiner had, at least in the first instance, rejected the patentability of that very inventive thought for which you were asking a patent?

A. It is almost impossible to answer that in the way he put it, because a lot of times these claims are changed without my knowledge. Therefore I cannot say I had the knowledge.

Q. 137. Did you have knowledge that there had been cited against you in the Patent Office this British and this German prior patent?

A. I don't remember it, although it is in the record.

(Recess taken until 2 o'clock P. M.)

Afternoon Session

2 o'clock P. M.

CHARLES B. GRAY, resumed.

By Mr. Davis:

X Q. 138. Mr. Gray, I understand you to say that you cannot remember now about this letter from the examiner—what he did say to you—is that right?

[fol. 73] A. There may be some things that I do not remember.

X Q. 139. I understood you to say before lunch that you could not now remember whether the examiner rejected that claim 17, on the ground that it was not patentable—can you remember that now?

A. Sometimes a case is rejected——

X Q. 140. I mean, can you remember now the particular fact whether or not the examiner in your own case did reject claim 17, on the ground that it was unpatentable—can you remember that?

A. I don't recall.

Mr. Davis: I ask that this certified copy of the file wrapper of the Patent Office be marked for identification.

(File wrapper in question marked Defendants' Exhibit No. 1.)

Redirect examination.

By Mr. Edelson:

R. D. Q. 141. Isn't it true that when you first filed your application, you originally submitted some twenty-six claims?

A. Yes, sir.

R. D. Q. 142. And that in the first office action the examiner in charge did allow claims 23 and 24?

A. Yes, sir.

R. D. Q. 143. That these claims 23 and 24 are identical with claims 5 and 6, as they appear in the patent?

A. Yes, sir.

R. D. Q. 144. Didn't the examiner, in his first office action, say: "Attention is directed to the excessive number of claims in this application. Many of them are the same scope and

substantially duplicates. Such practice is directly in contravention of numerous decisions both of this office and by the courts, and serve no purpose other than to impose a [fol. 74] needless burden upon this office, thereby delaying the proper prosecution of the case." Did the examiner say that in the first office action?

A. Yes, sir.

R. D. Q. 145. Subsequently, what did you do. Didn't you amend a number of the claims?

Mr. Davis: Objected to; the paper speaks for itself.

The Court: He has described the structure and called attention to elements in that structure. Counsel called his attention to the file wrapper and asked him whether or not he knew when he was giving that testimony that the Patent Office had rejected his claims, based upon these very elements, which were directed to his knowledge, and that is all that is being elicited now—to tell us what the Patent Office ruled. We can get that from the file paper when it is in evidence. What counsel really is doing is reading the file paper.

By Mr. Edelson:

R. D. Q. 146. In *this* claim- 23 and 24, which were originally submitted, which were allowed by the examiner, in that first Patent Office action, look at this—do not those claims call for two heads, "coil spring wire tube, having spaced coils and being located"——

A. I do not see that.

R. D. Q. 147. Does not claim 23 call for a "coil spring wire tube, having spaced coils, being located between the heads"?

A. It does.

R. D. Q. 148. What is that element in the release?

A. That is the open coil spring.

R. D. Q. 149. That is the outer spring casing?

A Yes, sir.

[fol. 75] R. D. Q. 150. It also calls for "flexible means joining the heads and definitely holding them at a fixed distance from each other, until said spring wire tube is partially compressed endwise."

A. That is the fibre covering around the open coil spring.

R. D. Q. 151. That is the fabric jacket around the spring casing?

A. Yes, sir.

R. D. Q. 152. It calls for a "stem extending slidably through one of the heads, having limited outward movement."

A. That is the plunger.

R. D. Q. 153. That stem is what element?

A. That stem is the hand piece for operating the thrust member.

R. D. Q. 154. Doesn't the claim also recite, "a slide member in the other of the heads"?

A. Yes, sir.

R. D. Q. 155. Doesn't it recite: "A coil wire tube intervening and adjustably joined to said stem and said slide member for the transmission of endwise motion from the said stem to said slide member"?

A. Yes, sir.

R. D. Q. 156. Doesn't it substantially recite all of the elements that go into your——

A. Yes, sir.

R. D. Q. 157. Do you know whether anywhere during the prosecution of your application there is an admission or concession that the use of the combination of the outer spring casing, having spaced coils and the inside thrust member, having closed coils, are old in the art?

Mr Davis: That is objected to.

The Court: A concession by whom?

Mr. Edelson: By Mr. Gray or his attorney.

[fol. 76] The Court: What difference does that make? He gets a patent and if he is allowed a patent for more than he should be allowed, so that it is invalid, the Court and jury may determine its invalidity, but if he does not get a patent, although he ought to have had one—if he has not one, the jury cannot find that he has a patent unless one was given to him, can he? In other words, a man making the application for a patent may have the real right for the allowance of the patent, for all of the claims, but if the Patent Office does not issue the patent, he has no patent?

Mr. Edelson: That is true.

The Court: What avail is it, one way or the other, an answer to that question?

Mr. Edelson: They are showing that Mr. Gray has cancelled certain claims in his patent. We want to show why those claims were cancelled.

The Court: What difference does that make, why they were cancelled, if they were cancelled? What we are concerned with are the claims which were allowed finally.

Recross-examination.

By Mr. Davis:

R. X Q. 158. Mr. Gray, it has just been called to your attention by Mr. Edelson that in this claim which he read to you, and which is the fifth claim of your patent, that it calls for "a coiled wire tube intervening and adjustably joined to the said stem." In this construction used by the Eastman Kodak Company, is the intermediate thrust member adjustably joined to the stem?

A. It is.

R. X Q. 159. How is that done?

[fol. 77] A. Spiral spring forms a helix, the same as an inner threaded member. They put a prick into this. That goes between or spreads this helix, and I could take that and run it in the same as I can run it out.

R. X Q. 160. That is, you can screw it in and out?

A. Yes, sir; I can run it out. If it is short and does not reach the plunger, I can lengthen it.

R. X Q. 161. I hand you one of these things. Will you please screw it in and out?

(Witness displays the contrivance to the jury.)

The Witness: I am lengthening it out.

By Mr. Davis:

R. X Q. 162. Let us screw it right off.

A. Isn't that screwing it off?

R. X Q. 163. Take it off entirely.

A. It is as adjustable as anything I could make.

R. X Q. 164. You can screw it off just the way you can screw a corkscrew——

A. I mean it is adjustable.

R. X Q. 165. Can you screw it off?

A. Isn't it coming off? I am not through yet. See the distance it is coming. I am taking it clear off now (indicating). There is no impression in this anywhere—simply opens up the coils a little and acts as a thread.

Mr. White: I think, Mr. Davis, you had better identify what you gave to the witness and which he displayed to the jury.

Mr. Davis: It is one of the modern Eastman Kodak releases.

The Court: Will one of the questions in this case be whether or not the mechanism described in some of these claims—I think the first and second—has been anticipated [fol. 78] by the British and German patents?

Mr. Davis: Yes.

The Court: Have you copies of those patents, so that the jury will be able to see them?

Mr. Davis: Yes; it is going to be a little difficult. We have not enough for each juror.

The Court: I think they can follow it.

By Mr. Davis:

R. X Q. 166. You understand, Mr. Gray, that the difference between the claim which the Patent Office rejected and this claim 5 which we have been talking about, and which requires that the joint should be adjusted, was that the rejected claim did not have the adjustable feature, is that right?

A. That was only a minor feature of the machine. It was not rejected on the open coil. It was rejected I believe, on—I forget the name of the patent, where it shows a screw thread—another thread attachment.

R. X Q. 167. The claim which was rejected didn't say anything about the screw threaded connection, is that right?

A. I don't know whether it is this particular patent. It had a screwed end to it——

R. X Q. 168. What I am asking you is—I read to you the 17th claim of your original application, and I read to you where the examiner rejected that claim. What I am asking you is this, that claim did not require that this connection be adjustable, did it—I mean the 17th claim which was rejected did not say anything about the connection being adjustable?

A. No, did not say anything about the adjustability of the plunger.

[fol. 79] R. X Q. 169. Look at the 6th claim of your patent. You see there where that claim says: "coiled wire tube intervening and threaded to said stem."

A. It is only a means of attachment.

R. X Q. 170. You mean the screw threading of it is only a means of attachment—is that what you mean?

A. Yes, it says "threaded to."

R. X Q. 171. Claims No. 5 and 6 are the only claims of your patent in which the coiled wire tube is specified?

A. It is specified in this 6th——

R. X Q. 172. In 5 and 6, and nowhere else?

A. The claims are a little broader than some of the other claims.

R. X Q. 173. So that wherever your patent specified a coiled wire tube, it also requires that that shall be adjustably threaded into the stem, isn't that right?

A. That is what you have been making.

R. X Q. 174. Your patent requires, wherever it calls for a coiled wire tube, coiled wire inner tube, it requires——

A. No, it does not require that particularly. That is only a side issue.

R. X Q. 175. Please answer my question. My question is this—you said that the only claims of your patent which mentioned coiled wire tube are claims 5 and 6. You have said that in both of these claims, it is specified in one that there is an adjustable connection, and in the other one it is a threaded connection——

A. I will have to go through the whole thing——

R. X Q. 176. If you have to — through all of this, you need not do that, because the jury can do that. I thought perhaps you could answer without going through it. When I asked you about this screw threaded connection, you said something about the Patent Office examiner rejecting the [fol. 80] claims on a screw threaded connection, in reference to some other patent.

A. He rejected one claim in reference to some other patent, I believe.

R. X Q. 177. Do you remember that he did reject that on a patent which showed a screw threaded connection between one of these plunger devices and the thing it was fastened to?

A. That is my recollection.

R. X Q. 178. I am showing you this patent to Mr. Duryea. Do you remember that that is the patent on which the examiner rejected the screw threaded connection?

A. Yes, sir.

R. X Q. 179. That shows, doesn't it, the push rod with screw threads at both ends, which are screwed into the actuating handle at one end, and the thing to be moved at the other end?

A. It shows it on the one end at least. It shows it on both ends.

Redirect examination.

By Mr. White:

R. D. Q. 180. Reference has just been made to the Duryea patent, which has just been shown to you. I will ask you to look at it and tell us of what the outer casing consists, and of what the thrust member consists in that disclosure.

A. The outer member consists of a closed coil wire, evidently heavy enough to withstand the thrust or push on the thrush member without the use of a jacket.

R. D. Q. 181. Without any jacket?

A. Yes, sir. In other words, it is strong enough to resist the pressure that is put on it without expanding it, without the use of the jacket.

R. D. Q. 182. The inner thrust member——

[fol. 81] A. It seems to be a solid wire that would very easily kink.

Recross-examination.

By Mr. Davis:

R. X Q. 183. Mr. Gray, I think you are mistaken about that wire casing being heavy enough, so that it won't expand, so that it will resist the thrust. I call your attention to the drawing in Fig. 3. Do you see that wire which is marked with the letter 2?

A. Shall I answer this? This is in use in such things as motorcycles and things like that——

R. X Q. 184. Please try to pay attention to what I am asking you. You said, and I think you are mistaken, and I want to correct you, if you were—you said in this patent the wire of the outer casing was heavy so that it did not have to be held at the ends——

A. It would have to be or we could not transmit motion.

R. X Q. 185. Didn't you say to the jury a minute ago in answer to a question of Mr. White that the outside casing

wire was so heavy that it did not need to have anything to hold it together?

A. Yes, sir; I still say so.

R. X Q. 186. I direct your attention to this little wire. Look at it carefully. It is marked with the letter 2 in Fig. 3 of the patent. Do you see that?

A. Yes, sir.

R. X Q. 187. It is shown in Fig. 2 and also in Fig. 3.

A. I see it in Fig. 2, yes, I see it here.

R. X Q. 188. I am going to read to you from this patent what Mr. Duryea said about it. I am reading from page 1 of patent, line 71. He says: "To prevent this stretching or lengthening I pass through the coil 1 a single strand of wire 2, and fasten its ends to the ends of the coil 1, in any suitable manner, as shown at 3 in Fig. 2." Do you understand that?

[fol. 82] A. I understand that. I stand corrected. There is nothing outside, as I first stated, but there is a wire in the inside.

R. X Q. 189. In other words, instead of holding this thing together by the outside woven wire spacing, the way they do in photographic releases, it is held by an inside wire, marked 2?

A. Yes, sir.

. . . . . .

Mr. Edelson: These wire cables marked Plaintiff's Exhibits 14 to 31 inclusive, and 31a, are now offered in evidence.

Mr. Davis: It seems to me that it ought now to be indicated to the jury which ones of these several numbers manufactured by the Kodak Company are charged to be an infringement of this patent, and which of them are not charged to be an infringement.

Mr. Edelson: At this time the plaintiff states that the following are alleged to be infringing releases: Numbers 2, 8, 15, 16, 20, 23, 25, 26, 28 and 29.

Plaintiff at this time offers Eastman Kodak release No. 13, and adds No. 13 to the list of alleged infringing types of cable releases.

(Eastman Kodak release No. 13 designated as Plaintiff's Exhibit No. 32.)

. . . . . .

Mr. White: With the consent of counsel for the defendant, I will put into the record a tabulation of the number of alleged infringing releases manufactured within the statutory period, the same evidence having been checked from the evidence in the record by both parties.

[fol. 83] (Tabulation referred to is as follows:

"Total Quantities of Alleged Infringing Releases Manufactured from 6/12/24 to 6/5/30, Both Dates Inclusive

Type # 2	785000
# 8	6000
#13	990900
#15	7828
#16	242900
#20	31500
#23	9665
#25	36500
#26	10900
#28	42000
#29	250000
	3412293")

Myron F. Hill, sworn.

Direct examination.

By Mr. White:

Q. 1. Mr. Hill, where do you reside?

A. My legal residence is Lansdowne, Pennsylvania. My business address is Baltimore, Maryland.

Q. 2. What is your business or profession?

A. I have spent my life with relation to patents, both as to practicing as a patent attorney before the Patent Office, advising as to litigation, manufacturing and developing patented articles. I am now president of a company that licenses the use of inventions——

The Court: Let me inquire of counsel—into what are you proposing to go—the validity of this patent?

[fol. 84] Mr. White: On the question of infringement.

The Court: I had in mind, subject to the persuasive powers of counsel to change my mind, that you make out a prima facie case of validity by offering your letters patent in evidence, and your patent is valid until the other side has offered evidence of some facts which would render your patent invalid.

Mr. White: That is our view.

The Court: Then, of court, you have the right to reply to that, but the danger is, unless you draw that line very clearly the danger is we would be really duplicating evidence, just doubling the time of the inquiry.

Mr. White: My purpose is——

The Court: If you are going to restrict this to the question of infringement——

Mr. White: The infringement, also reasonable royalty.

The Court: For the present you are resting the decision on the question of validity upon the prima facies of your patent?

Mr. White: That is right.

By Mr. White:

Q. 3. What company is that?

A. Gerotor Licensing Company. The Gerotor is interpreted as generated rotor for compressors, pumps, and engine construction.

Q. 4. You have been engaged in this professional work all your life practically?

A. After graduating in college and taking a degree of Master of Arts I entered the Patent Office as an examiner. I was there between three and four years. Then I resigned, and since that time I have acted in the capacity of consult-
[fol. 85] ing engineer, head engineer of corporations, or as patent solicitor or as developing inventions for the market.

Q. 5. Mr. Hill, have you examined the patent in suit, granted to Charles B. Gray, No. 1,314,867?

A. Yes, sir.

Q. 6. Have you examined the alleged infringing releases which have been offered in evidence—type No. 2—I am going to ask you all at once, so we can get it clear—type No. 2, introduced as Plaintiff's Exhibit No. 21; type No. 8, introduced as Plaintiff's Exhibit No. 22; type No. 13, introduced as Plaintiff's Exhibit No. 32; type No. 15, introduced as Plaintiff's Exhibit No. 26; type No. 16, introduced

as Plaintiff's Exhibit No. 19; type No. 20, introduced as Plaintiff's Exhibit No. 16; type No. 23, introduced as Plaintiff's Exhibit No. 24; type No. 25, introduced as Plaintiff's Exhibit No. 25; type No. 26, introduced as Plaintiff's Exhibit No. 15; type No. 28, introduced as Plaintiff's Exhibit No. 14, and type No. 29, introduced as Plaintiff's Exhibit No. 23.

A. I can not remember them all by number, but I have examined all of these types.

Q. 7. I will show them to you so that you may be sure you have examined them. Is the number of each type stamped on the plunger?

A. Yes.

Q. 8. I am showing them to you so that you won't make any mistake about them.

A. I am familiar with Nos. 8, 29, 28——

Q. 9. I am going to ask you about each one separately. Perhaps we could do it that way and save a little time. Let us take up type No. 2, in the first place—do you find that?

A. No. 2, yes, sir.

Q. 10. You have examined that cable release, manufactured by the defendant company?

[fol. 86] A. Yes, sir.

Q. 11. I will ask you to look at Mr. Gray's patents. First, will you read Claim No. 1?

A. Mr. Gray claims in his invention a mechanism of the nature described——

Mr. Davis: I object to this. The jury can read it.

Mr. White: I am going to ask the witness what elements in these cable releases he finds which are identical with those disclosed in the claim in the patent. That is all.

The Court: If you ask that question, you are going into the question of validity, aren't you?

Mr. White: No, I am going into the question of infringement. I am asking him if the elements found in the disclosure are found in that release.

The Court: If you are going to ask whether they are disclosed in the structure of the defendant, that goes to infringement, but if you are going to ask him what are in the claims of the patent, that goes to the validity clearly.

Mr. Davis: It has already been stated, in answer to your Honor's question, and in the presence of the jury, that the

defendant does not deny that claims 1 and 2 of the patent are infringed, if they are valid.

The Court: What is the use of troubling yourself about that? Go to claims 3, 5 and 6.

By Mr. White:

Q. 12. All right, look at claim No. 5—read it to yourself.

The Court: The release you are asking about is the release of the defendant?

Mr. White: Yes, sir.

[fol. 87] The Witness: In claim 5 I find these elements of the claim in defendants' release: the two heads, which are these two heads here (indicating), two end pieces, a coiled spring wire tube, having spaced coils—that is the outer coil, spaced apart, which is proved by the fact that I can press them together; located between the heads, which is evident; a flexible means, joining the heads; this is the jacket or stocking or fabric or whatever you wish to call it, fastened to the two heads; definitely holding them at a fixed distance so that you can pull them further apart. The fabric holds those heads from being pulled further apart beyond a certain point, and at the same time it is quite evident that the spring is compressed endwise, proved by the fact that the whole unit tends to set pretty straight.

Mr. Davis: I think that I ought to say, to save time, what must already have been apparent to your Honor, that the defendant admits that all of the elements of claim 5 are present in defendant's structure except the element defined, adjustably joining of the stem to the tip and to the cushion. Also, with respect to claim 6, since I assume that counsel will go on to that, defendant agrees that all of the elements of that claim are present in its structure, except the element of threading the stem—threading the tube to the stem and to the slide member.

The Court: Is it agreed on your part, Mr. White, that these elements, excepting elements, which he mentioned, in each claim, are not present in the alleged infringing instrument?

Mr. White: No, your Honor. We claim it is present.

[fol. 88] The Court: Then limit yourself to that one thing.

The Witness: I have taken apart a number of these releases; I have disassembled or taken apart these releases,

a number of these releases of this type, and I find that the inner coiled tube is adjustably screwed to each head, as proved by the fact—I should say to each stem at each end—as proved by the fact that the stem can be unscrewed from the wire, if it is done in the right way. Now, that would never be done by a customer. That is only done in the factory where they are making the thing, adjusting them for one length or for another length—for one length of plunging action or another, or by some repairman who may want to readjust the release to the particular camera he was repairing. I do find that the connection is such that it may be adjusted. I also find that it is a modification, you may say, of threading joint.

I find that the tube into which the inner coil is inserted has a nick in it. That causes a depression on the inside of the tube, separating the coil, which makes it possible to twist that coil in such a way that it will go right out again, and you can pull it out or push it back and adjust it in different positions. The thread is very much like that of a bottle which I picked up this morning in a drug store. The coil, you may say, has the effect of this thread on the glass——

Mr. Davis: I object to the relevancy of the bottle in this case.

The Court: He is simply using it for the purpose of illustration.

[fol. 89] The Witness: It happens to be a tube with a depression in it—two depressions. As you turn it, it tightens up like a screw.

By the Court:

Q. 13. Wherein does it differ from any screw——

A. Just the length of the thread upon this member.

Q. 14. You may have a long one or a short one.

A. Yes, sir.

Q. 15. In principle they are all the same?

A. I find that idea in all these releases.

By Mr. White:

Q. 16. When you say all the releases, you mean those you have been shown?

A. Yes, sir; I have been through all of these exhibits.

Q. 17. What experience have you had in determining what licenses are properly payable under patents?

The Court: Why limit it to patents?

Mr. White: Or the use of any invention or device.

The Court: General experience with the adjustment of royalties.

The Witness: During my experience as patent attorney in general practice, from the year 1907 until 1918 I was in the habit of drawing up licensed contracts for clients for the sales of their inventions, discussing with the inventor the amount of royalty that he was entitled to charge for the particular invention that he had in mind or that he had in hand, and since the year 1921 I have been engaged in this particular licensing business. The first part of the period was that of development, during which time various [fol. 90] proposals came up from manufacturers for licenses, resulting in a discussion of the proper terms for a license, with such corporations as the Westinghouse Company, the Westinghouse Airbrake Company, Union Carbon and Carbide Corporation, and other companies of that kind. We have executed a number of licenses, based upon royalty, perhaps the latest one being that of the May Oil Burner Corporation, where we had to fix a license royalty; where it was fixed, based upon an invention which was incorporated and is shortly coming out in large advertisements, in their oil burner set, for the use of this mechanism in pumps and oil pumps. We are in contact with other large corporations. Even this morning I was having a discussion with one of the men representing the development in that direction, involving some half million units a year, and the question of royalty, the subject of royalty, has been brought up in my work almost from the very beginning—one of the principal things connected with patents, aside from an occasional sale.

By Mr. White:

Q. 18. Mr. Hill, we have before us a device which you have examined; we have certain evidence regard the same which you have heard—you have been here during this trial?

A. Yes, sir.

Q. 19. Based upon your experience and knowledge will you express your opinion as to what would have been a fair

and reasonable royalty for the defendant to pay the plaintiff for the use of this invention, assuming it is his to bargain for, during the period of six years prior to June, 1930?

Mr. Davis: That is objected to.

The Court: On what grounds?

[fol. 91] Mr. Davis: Upon the ground that the general question of this kind is not admissible to go to the jury on the question of royalty.

By the Court:

Q. 20. Let me ask you—here is a royalty which is fixed in a particular case, depending upon the special conditions surrounding that case, or is there any general rule of practice fixed upon a percentage of the selling price or cost price or any other feature of the patent?

A. Of course, there is no fixed amount of royalty that you can say is universal for the use of patents. It is a very common thing to find a royalty of 10 per cent.

Mr. Davis: That is objected to.

The Court: Strike out 10 per cent and say it is based upon a percentage.

The Witness: I was going to modify my answer to get the same results.

The Court: Strike out the 10 per cent.

The Witness: Based upon a percetage of the selling price to the consumer; that percentage varies with the value of the invention and the circumstances surrounding the industry within it.

The Court: I think that gets it very clear. Do you renew your objection?

Mr. Davis: Yes, sir.

The Court: I will overrule your objection and give the defendant an exception.

By Mr. White:

Q. 21. Will you answer the question?

A. I have thought this over very carefully——

The Court: Does he have in mind—I will be corrected in this statement if I am wrong—that the wholesale selling

[fol. 92] price of these releases is twenty-three cents, and the retail price thirty-five cents?

Mr. Davis: Yes; also sold separately from the cameras. Those that were sold with the cameras, we will put in evidence as to what they were sold for later.

By Mr. White:

Q. 22. You also have in mind, I assume, the fact, as Mr. Davis has just intimated, that probably the major portion of these releases are sold in connection with cameras?

A. Yes, sir; I am also assuming a manufacturing cost, having been a manufacturer myself for nine years——

Q. 23. Don't mention any amount in that case.

A. One comes to certain conclusions about cost of manufacture. Also one is familiar with the usual business practice, determining the cost of manufacture, determining the sales cost, any other cost, multiplying that by a figure for a retail list price—for instance, furnishing the discount from that list price to the distributor, leaving the net profit to the manufacturer.

Q. 24. What other elements did you take into consideration in determining what a reasonable royalty is, in expressing your opinion of what a reasonable royalty should be?

A. I have taken into consideration the fact that some of these releases may be in use, on the one hand, and on the other hand, that they affect the value of the camera as a whole, to make it a more satisfactory instrument, making it more easily sold in competition with other cameras not properly manufactured, or not so manufactured, running into values that are impossible to determine, and in arriving at a proper figure one has to be practical, and in giving [fol. 93] an opinion of my own as to the matter, I have tried to arrive at a figure which seems to me to be ultra-conservative. For example, if this release was a complete article by itself, that did not affect the camera or some other instrument, and costing vastly more, in proving its value, I would not fix the same royalty that I have in mind. A cheap toy—35 cent toy, perhaps a penny would be plenty, at the beginning and at the end of it. It doesn't affect the value of anything else. You cannot charge 10 per cent on the cost of the camera. That would be out of reason. What can we fix as a basis to fix the value? The public is paying

35 cents for these things. If we fix 10 per cent on that, that is 3½ cents apiece—

Mr. Davis: I object to the argument of the witness.

The Court: I would like you to tell me if the opinion of any expert on anything is not a real argument.

The Witness: There is another factor that enters into that price, as it stands today, the royalty itself, if we put a 3½ cent royalty in there, it raises it from 35 cents to 38½ cents.

The Court: Do I understand that you are objecting to his giving the reason for his opinion?

The Witness: I haven't given my opinion yet.

Mr. Davis: No, I am not objecting to him stating those things which he took into consideration.

The Witness: I have nearly finished the considerations that brought me to the opinion I came to. It costs something to collect 3½ cents royalty, to do the accounting. It is customary to add the licensed cost to all the other factors of cost together to determine the total. That would [fol. 94] bring the selling price perhaps altogether too high—nobody knows where it would run. But, if we allowed a cent and a half, say, for cost, and gave a profit on the extra investment that they are putting into the cost of these releases, that would bring a price of 40 cents instead of 35 cents to the customer. I should think that a minimum royalty that ought to be charged would be four cents a release. That is my judgment.

By Mr. White:

Q. 25. That is your opinion, four cents a release?
A. Yes, sir.

Cross-examination.

By Mr. Davis:

X Q. 26. Mr. Hill, when you made your estimate of this royalty, did you know what the total cost of the releases was to the seller? That is, the manufacturing cost and also the selling cost?

A. No.

X Q. 27. You mentioned that if a royalty were added to the article, that royalty would be multiplied in the distribution and bringing of the goods to the public finally?

A. That is generally done.

X Q. 28. What you meant by that was that if you should add four cents to this twenty-three cents of the manufacturer's selling price, why then every distributor would add his profit to that four cents, so that by the time it got to the public that four cents would be eight cents; is that right?

A. Yes.

X Q. 29. So that it was your opinion that it would be a fair thing to add eight cents to the price of this device to the public?

A. No. I felt that five cents, under the circumstances, is about as high as the release ought to be sold at. The mo- [fol. 95] ment you begin to increase the price, it affects the sales perhaps.

X Q. 30. Then your idea is that five cents is the most that you could all to the thirty-five cents?

A. I should think that would be—we would have to scale it down to that point, yes.

X Q. 31. You mentioned, you said you thought a fair royalty would be 10 per cent, but you did not say 10 per cent of what.

A. Of forty cents.

X Q. 32. That is 10 per cent of the new price of the article?

A. Yes.

X Q. 33. After the royalty had been added on to it?

A. Yes.

X Q. 34. Did you take into consideration in arriving at that opinion whether or not there were available other releases that could be sold and used for the same purpose at the same price?

A. I did take that into consideration, and I also took into consideration a balancing factor, the increased value of the camera itself to which it was attached, which was disregarded otherwise.

Mr. Davis: Will your Honor instruct the witness to answer my questions and confine himself to that?

The Court: Well, the witness is evidently making the best effort he can to answer your questions, but it of course is well for him to have in mind that you better confine your answers to the specific questions that are asked of you. Of course, you have the right to make your answer clear,

but if there are any other matters to be brought out, counsel will bring them out on re-examination. So, as a general proposition, limit your answers to replies to the questions that are asked you.

[fol. 96] By Mr. Davis:

X Q. 35. Mr. Hill, you recall that when the plaintiff's lawyers put in evidence these releases manufactured by the Eastman Company, they put in a number which they do not charge to be an infringement of the patent.

A. I understand that.

X Q. 36. And you understand that the reason these other numbers, which are Nos. 3, 4, 5, 6, 7, 10, 11 and 12, are not charged to be an infringement is that they do not have the coiled inner tube or push member, but instead have a straight wire?

A. Yes.

X Q. 37. Do you know whether these devices which are not charged to infringe the patent are sold to the public with the Eastman Company's cameras or separately at the same price that those are sold which are charged to be an infringement?

A. I presume that is likely. I do not know.

X Q. 38. Did you know that?

A. No, I would not say that I knew it.

X Q. 39. You did not take that into consideration?

A. Yes, I did take it into consideration.

X Q. 40. Even though you did not know it?

A. Well, I understood that there were some of these numbers that were not made according to this principle, and that they were sold. Just what was in them I did not know. I did not know whether they had a straight wire or twisted wire or twisted strand or what they had.

X Q. 41. Now, to come to this matter of what you say is an adjustable connection of the coiled wire tube to the tip and to the push button, in your testimony you said that in the factory these things were screwed on and off to adjust the length?

A. No, I beg your pardon, I didn't say that.

[fol. 97] X Q. 42. What did you say?

A. I said that they could be adjusted to different lengths for different purposes.

X Q. 43. But you mentioned the factory, and you said in the factory they are so adjusted.

A. In the factory—the adjustment was made either in the factory or the repair shop.

X Q. 44. You do not know whether they are adjusted in the factory or not to produce different lengths?

A. Undoubtedly they are adjusted in the factory to the right length.

X Q. 45. And you have been in the factory?

A. No, but I can see the results, that presumably work with the camera.

X Q. 46. You say that there is occasion for having these release members of different lengths for different cameras, is that true?

A. I said it might be done for that purpose. I said it was capable of that use, yes.

X Q. 47. What I am asking you is, I understood you to say there were occasions when for different cameras you did need to make those of different lengths?

A. I could imagine, if the movement was a short one and a precise one and were to take place, that an adjustment might be desirable.

X Q. 48. Did you ever try to adjust one of these Eastman releases and then make the camera work with it?

A. I have tried the adjustment on the release, but I have not applied it to a camera, no.

X Q. 49. And as I understand it, you have screwed off part way the tip of one of these releases, but you never then put the release back on the camera to find out whether it would work?

[fol. 98] A. I have gone through the releases, testing one here and there, enough to satisfy myself that all of the releases of the same construction have the same action, capable of being adjusted.

X Q. 50. I do not think you understood my question. The question was whether you ever made such an adjustment on one of these releases and then tried to put that adjusted release back on to the camera shutter and make the shutter work?

A. No, I have not adjusted one to any camera.

X Q. 51. Now I want to take up with you this matter of what you refer to as the screw threaded connection, by reason of the fact that the inner member is a coiled wire and there is a little pin prick or dent in the tube that is passed over it. As I understand, it is your idea that that makes in effect a screw threaded connection?

A. For the purpose of that adjustment, yes.

X Q. 52. I show you a device, one of these devices, one of these releases. Will you look at it and tell me if it has a coiled wire inner member?

A. Yes.

X Q. 53. And the little tube at the end is fastened on by a prick pinch?

A. Yes.

X Q. 54. Indentation in the metal?

A. And by a threaded edge, apparently.

X Q. 55. And would you say that that is a screw threaded connection?

A. It acts like a screw threaded connection for the purpose of maintaining an adjustable condition, because you can pull it out before you make a pinch, or you can put it back, and you can make the indentation to hold those threads in any position.

Mr. Davis: If the jury please, I call your attention to the fact that this device which the witness says has a screw [fol. 99] threaded connection is the device which has been offered in evidence and which was sent by the Eastman Company to Mr. Gray when Mr. Gray in 1919 first brought his supposed invention to the attention of the Eastman Company. I would like to note on the record that the release referred to is in evidence as a part of Plaintiff's Exhibit 8.

Louis A. Darling, sworn.

Direct examination

By Mr. White:

Q. 1. Mr. Darling, will you as briefly as you can just give us your history as a mechanical engineer?

A. Graduate mechanical and electrical engineering, Kentucky University. Spent nine years in teaching in four universities, namely, University of Nevada, Reno; Stanford University, California; Swarthmore College, Pennsylvania; and Cornell University, New York. The time was spent in teaching and engineering work, design work and shop work, and lecturing, and writing of textbooks, two of which are

nised at Cornell University and elsewhere for a great many years.

Q. 2. On what subjects?

A. Elements of drawing and elements of descriptive geometry.

Q. 3. You are a mechanical engineer by profession?

A. I took a master's degree at Stanford University, in addition to the degree of B. M. E. at Kentucky.

Q. 4. Have you been engaged also in a practical way in engineering work?

A. For eighteen years I have been in general engineering work. Three years at the General Electric Company in turbo generator design and part time in charge of the [fol. 100] Thompson-Husing Apprentice Trade School; and three years at Grand Rapids, Michigan, with the R. G. Peters Company, as manager of that manufacturing corporation; three years with the Reno Electric Company in connection with turbo generator design and headlight design; and one year in Boston, with a company which I organized myself, which was sold out to the Electric Service Supplies Company in this city, where I have been for twelve or thirteen years.

Q. 5. You now have what position with the Electric Service Supplies Company?

A. At present I am in a consulting capacity in connection with the interpretation of their designs looking towards getting out patents, and also I am connected in engineering sales work with James Spear Stove and Heating Company.

Q. 6. Have you examined the patent in suit, Mr. Gray's patent?

A. I have.

Q. 7. And especially claims 5 and 6 thereof?

A. Yes.

Q. 8. And you have also examined, have you, the exhibits which are there on the balustrade beside you?

A. Yes.

Q. 9. And which are those which have already been enumerated and examined by Mr. Hill?

A. Yes, I have seen them.

Q. 10. Now, confining yourself to one or two points, in claim 5 of the patent in suit, claim is made, as you know, for a cable release containing an outer open coiled spring

casing and an inner coiled tube, which is a closed coil, and then the claim continues, and adjustably joined to said stem; that is the intervening coiled wire tube, adjustably joined to said stem and said slide member for the transmission of endwise motion from said stem to said slide member. Will you kindly tell us whether or not that element [fol. 101] is found in the infringing articles, or the alleged infringing articles, which have been offered in evidence and you have before you?

A. There is an adjustable means at both ends of that inner coil.

Q. 11. Of what does it consist?

A. It consists of an outer tube over each end, an indentation in the outer tube, which extends down in between the coils of the coiled spring.

Q. 12. Now, turning your attention to claim 6, it refers to and claims in connection with the statements of the nature of the invention, which I just referred to, a coiled wire tube intervening and threaded to said stem and said slide member for the transmission of endwise motion. Now, will you state whether or not that element is found in the alleged infringing article?

A. It is a form of threaded joint.

Q. 13. Do you wish to explain that any further, or do you think that is covered by your answer?

A. A thread is an incline that goes around a center. A nut is anything that works on the outside of it; that is some indentation or some means of climbing up and down the incline when you turn it. That is what a thread is.

Cross-examination.

By Mr. Davis:

X Q. 14. Dr. Darling, I am going to show to you too this release which was sent by the Kodak Company to Mr. Gray in 1919 and is in evidence as a part of Exhibit 8, and that has the coil, the wire inner member, hasn't it?

A. Yes.

X Q. 15. And the tip is fastened on to that by this same prick punching or indentation which you say makes it into a screw threaded connection?

A. It will function that way.

[fol. 102] X Q. 16. In other words, everything that you have said about the defendants' structures which are charged to be an infringment is equally true about this device which was sent by the Kodak Company to Mr. Gray in 1918?

A. Yes, these exhibits, they have the same construction.

Redirect examination.

By Mr. White:

R. D. Q. 17. However, Dr. Darling, will you tell us what the construction of that is with regards the other members of it?

A. The total members in the whole thing?

Mr. White: Yes.

Mr. Davis: If the Court please, I object to this. It was testified by the plaintiff, Mr. Gray, that the only difference between this device that was sent to him in 1918 by the Kodak Company and the device which he had sent to them as an embodiment of his supposed invention was that the device sent to him by the Kodak Company had a tightly wound outer casing, and the device he sent to them had an open wound outer casing.

Mr. White: That is right.

The Court: What have we to do with that, anyhow? That was before the patent was issued.

Mr. White: That is quite true, but Mr. Davis handed him this and had him point out that there is a threaded connection, and he asked the question and got such an answer as to suggest that it was the same thing as the plaintiff's invention. I just wanted to make clear that this has a closed coil on the ouside and not an open coil.

The Court: What is this, examination in chief or re-examination?

[fol. 103] Mr. White: This would be re-examination.

(Question R. D. Q. 17 repeated by the stenographer.)

The Court: That is directed to this adjustable feature in the one claim and the threaded feature in another claim?

Mr. White: No. I was just wanting to create no misimpression that this was just like the plaintiff's device. That is all.

The Witness: I was speaking with reference to the joint.

Mr. White: The cable release now in the hands of Mr. Darling was handed to him by counsel for the defendant. It is already in evidence. It is an Eastman Kodak release which was sent to Mr. Gray at the time when they sent back the sample he sent them in 1918.

The Court: Now, the question is what?

(Question R. D. Q. 17 repeated by the stenographer.)

The Court: Unless there is an admission that that release was made, used or sold by the defendant after the patent issued, I do not see that we are concerned with it.

Mr. Davis: Well, the concern with it is on a different aspect of the case, if your Honor please; but the only question here is that counsel thought that perhaps the jury had been misled by what Dr. Darling said into supposing that he was saying that the two things were the same throughout and all he said was that the threaded connection was the same.

[fol. 104] The Witness: That is right.

Mr. Davis: I think there is really no dispute about that.

Mr. White: No, there is not.

Mr. White: Now, if the Court please, I am formally offering in evidence the depositions which were taken on the motion of the defendant to quash the summons and set aside the service. I offer in evidence the depositions and all exhibits connected therewith, so that they may be made a part of the record.

RENEWAL OF MOTION TO QUASH, ETC.

Mr. Davis: And the defendants, Eastman Kodak Company of New York, and Eastman Kodak Company, a corporation in New Jersey, now renew their motion for quashing of the writ and setting aside of the service, and for a nonsuit as to those two defendants.

The Court: The record may show your renewal of the motion respecting the service of process, and your motion for a nonsuit is overruled.

Mr. White: Our case is closed.

Mr. Davis: Exception.

The Court: It is not the subject of exception. The record may show that you asked for one, but it is not the subject of exception.

Plaintiff rests.

[fol. 105] EVIDENCE IN BEHALF OF DEFENDANTS

ALBERT K. CHAPMAN, sworn.

Direct examination.

By Mr. Davis:

Q. 1. Mr. Chapman, you are connected with the Eastman Kodak Company of New York, at Rochester, New York?

A. I am.

Q. 2. What is your position?

A. Production manager.

Q. 3. How long have you been with them?

A. Since 1919.

Q. 4. Do you know whether or not these camera releases are sold separately from the cameras in some cases and in other cases are sold with the cameras?

A. Yes, that is true.

Q. 5. You were here in court when plaintiff's counsel put in evidence two sets of the Eastman Kodak Company's releases, one set of which was charged to be an infringement and the other set was not charged to be an infringement?

A. I was.

Q. 6. Do you know whether all of those releases are sold by the Eastman Kodak Company when they are sold separately from the camera at the same price?

A. Yes, they are sold at the same price.

Q. 7. No differentiation in price made between those releases which contain the closed coil push member and those which contain the wire push member?

A. No, there is no difference in price.

Q. 8. When you sell these releases attached to a camera, is the price of the release merged in the price of the camera?

A. Yes, it is.

[fol. 106] Q. 9. Has the Eastman Company ever made any special charge for its cameras on account of the use of

this type of release in which there is a coiled inner member?

A. No, never has.

Q. 10. Now, I show you a letter which has been put in evidence as Plaintiff's Exhibit 13, dated October 31, 1923, and addressed to C. B. Gray, the plaintiff here. Did you write that letter and is that your signature at the end of it?

A. Yes, I wrote the letter and that is my signature.

Mr. Davis: I will read the letter to the jury to refresh your recollection. It has already been in evidence. The letter says:

"DEAR SIR: Since your call upon us a few days ago, we have given careful consideration to your U. S. patent No. 1,314,867, September 2nd, 1919. Because of the circumstances outlined in detail to you by Mr. Stewart of our Patent Department, we find that we must adhere to the opinion that our cable releases do not infringe any valid claims of your patent.

On June 21st, 1918, one of your cable releases embodying the construction mentioned in the above patent was sent to us by Mr. Knaffl. This cable release we found to be similar to cable releases which we had made and marketed for several years except for two features, both of which were not original with you. First, the flexible casing included an open coil spring, and second, the plunger of the cable release consisted of a closed coil spring. We knew of the open coil spring before your cable release was submitted to us as is shown in the following United States patents:

[fol. 107] 828,815, Edwards, August 14, 1906,
929,573, Edwards, July 27, 1909.

The use of a closed coil spring thrust member is shown in our U. S. patent No. 1,297,327, Dakin, et al., March 18th, 1919. We filed a patent application for this device October 15th, 1917, eight months before your cable release was submitted to us. Claims to this closed coil spring thrust member were abandoned because of its being shown in an old German patent No. 147,572, Werman, May 28th, 1902.

We feel that the circumstances outlined above furnish convincing evidence that the cable release which you submitted to us differed from those which we had had on the market for years only in these two ways, and that cable re-

leases embodying the construction constituting these two differences are clearly shown in the prior art.

We hope that, after you have had an opportunity to review these matters with your attorney, you will agree with us in believing that our contentions are correct. Meanwhile we wish to thank you for the courteous way in which you have approached us on this subject.

Yours very truly," and so forth.

By Mr. Davis:

Q. 11. Now, Mr. Chapman, did you have an investigation made to ascertain the facts that are set forth in that letter before you wrote it?

A. Yes, we did.

Q. 12. And did the letter accurately state the facts as they existed at that time?

A. It did.

Q. 13. And did you ever hear any more from Mr. Gray on the subject?

A. No, not to the best of my recollection.

[fol. 108] Cross-examination.

By Mr. White:

X Q. 14. Mr. Chapman, you have spoken of those rather considerable number of other types of your releases which Mr. Davis showed you which do not contain the feature of the inner closed coil but use a wire or some other such——

A. Yes.

X Q. 15. Is it not a fact that the number so manufactured during the period in controversy, with wires or some other member except the closed coil spring, amounted to 136,000 as against nearly four million altogether?

A. I don't know whether those figures are correct or not.

Harry L. Thomas, sworn.

Direct examination.

By Mr. Davis:

Q. 1. Mr. Thomas, you are connected with the Eastman Kodak Company of New York, at Rochester, New York?

A. Yes.

Q. 2. In what capacity?

A. Accountant.

Q. 3. You have made an examination of the records of the company with respect to the number of these cable releases that have been sold by the Eastman Kodak Company of New York in the period covered by these proceedings?

A. Yes, I have.

Q. 4. Can you tell us what is the sales price of releases which are sold in the United States apart from cameras; that is, the price of the Eastman Company to its distributors?

[fol. 109] A. Twenty-three cents.

Q. 5. And that is regardless of the type of release? They are all sold at the same price?

A. At one price.

Q. 6. It has been testified that when the release is sold with the camera the selling price of the release is merged in the selling price of the camera. Have you made an examination of the figures which enable you to say what is the selling price of a release sold with a camera?

A. Yes, I have.

Q. 7. And will you tell us how you went about that and what the result was?

A. I found the relation of the cost of the cable release to the cost of the camera.

Q. 8. That was the first step?

A. And applied that percentage to our selling price of our camera.

Q. 9. What was the selling price of the release attached to the camera, the average selling price of those sold in the United States?

A. During the six-year period, eleven cents.

Q. 10. How are these cable releases sold abroad?

A. The average selling price represents cost plus 15 per cent.

Q. 11. And that is whether they are sold with the camera or apart from the camera?

A. Yes.

Q. 12. And have you figured out what that selling price would amount to per unit?

A. Yes, I have.

Q. 13. What is it?

A. Approximately eight cents apiece.

Q. 14. That is, to recapitulate, those releases which are sold in this country separate from cameras are sold for twenty-three cents apiece; those which are sold with cameras in this country are sold for eleven cents apiece; [fol. 110] and all those sold abroad are sold for eight cents apiece?

A. Yes.

Q. 15. Can you tell us how the sales of these releases are distributed during this period, how they have been distributed with respect to sales, separately in the United States, as well as with cameras in the United States and the sales abroad?

A. Yes, I can. In the United States there were 1,605,194 sold as parts on cameras; 503,990 were sold as separate units; there were 10,178 that were used on free repairs; and 1,602,436 were exported.

Mr. White: In what period did you ask him?

Mr. Davis: This is the period covered by the proceeding, the statutory period.

By Mr. Davis:

Q. 16. There has been evidence here of the factory cost of these releases as it is shown on these record cards. Now will you tell us what is added to the factory cost to make up the actual cost to the Kodak Company of the releases?

A. The factory cost consists of the direct labor, direct material, and our factory overhead.

Q. 17. And then when you get that factory cost, what do you add to it to determine the actual cost to the company including sales and everything?

A. We add our selling and administrative expenses, and in addition to that we have a wage dividend and Federal taxes.

Q. 18. Is that selling cost a fixed percentage of the factory cost price or what?

A. The selling cost is based on sales.

Q. 19. That is on the selling price?

A. On the selling price.

Q. 20. And it is a fixed percentage of the selling price?

[fol. 111] A. Over this six-year period, yes.

Q. 21. Now will you tell us whether you have made such additions to the factory cost by calculation with respect to these releases?

A. Yes, I have.

Q. 22. And have you then made a calculation or estimate of the total net profits to the Eastman Kodak Company from the sale of all these releases in the statutory period?

A. Yes, I have.

Q. 23. Will you tell us what that total is?

A. $73,602.

Q. 24. And will you tell us how it is divided, if you can, among the releases sold separate from cameras and on cameras, in this country?

A. Yes, I can. Sold as part of cameras, we have a net profit of $26,977. Sold separately in the United States, $36,308.

Q. 25. And what about the sales abroad?

A. Exports, $10,317.

Q. 26. Now, that total figure, $73,602, includes the net profit on all of the releases during that period, including those which were not charged to be an infringement, is that right?

A. That is right.

Q. 27. Have you been able to say what part of that total was profit with respect to those which are charged to be infringements?

A. It represents 91.68 per cent.

Q. 28. And what is the total figure?

A. $67,478.

Cross-examination.

By Mr. White:

X Q. 29. Mr. Thomas, do you mean to say that those types of cameras which are not infringements constitute —did you say 97 per cent?

[fol. 112] A. I did not.

X Q. 30. In other words—I heard the figures just wrong —91 per cent, according to your own calculation, of the releases which you sell are those which are alleged to be of the infringing type?

A. That is true.

X Q. 31. Now, you said what the price was of the release received by the Eastman Kodak Company, but you did not

mention the price charged to the consumer. Do you know what that is?

A. I am speaking now of the Eastman Kodak Company of New York. Our net selling price is twenty-three cents.

X Q. 32. My question was how much the price was when the release was sold to the consumer?

A. Thirty-five cents.

X Q. 33. How did you determine that the average selling price of releases attached to the camera was eleven cents?

A. Took our camera sales, domestic sales, over the six-year period, June 9, 1924, to June 9, 1930, and arrived at the selling value, and then we found out the relation of the cost of the cable release to the cost of the camera, which was 1.2 per cent, and applied that to our average selling price on cameras during the six-year period.

X Q. 34. Now, you do not seriously mean to tell this jury that that represents the cost of selling those—what you received for those releases, do you?

A. In relation to the price of the camera.

X. Q. 35. If the release was very much less expensive to make than the other parts of the camera, that would indicate that you got very much less for it than you really did, wouldn't it?

A. Quite true, yes.

X Q. 36. Have you got the average cost of making these releases in your mind?

[fol. 113] A. Yes, I have.

X Q. 37. How much is it?

A. 6.96 cents.

X Q. 38. And the average cost of the camera is, I suppose, then, how much?

Mr. Davis: I object to that.

Mr. White: You can not give a figure and then not explain it.

Mr. Davis: You yourself withdrew yesterday afternoon the cost and selling price of the cameras.

Mr. White: Well, I know, but he can not make a statement and then we not cross-examine him on it. I am just asking him to test his figures.

(Objection withdrawn.)

(Question No. X Q. 38 repeated by the stenographer.)

The Witness: I haven't the working papers here.

By Mr. White:

X Q. 39. Well, how much is the average cost of a camera?

A. I will have to look that up.

X Q. 40. Well, if you haven't got that before you, how could you determine the percentage that the cost of the cable release was of the average cost of the cameras?

A. Approximately $9 apiece.

X Q. 41. That is the average of all types, is it?

A. Yes.

X Q. 42. That used cable releases?

A. Yes.

X Q. 43. You are sure you did not include those that do not use cable releases?

A. These cameras just apply to the ones that use cable releases of all kinds.

[fol. 114] X Q. 44. And then you get a percentage of the cost of the cable to the cost of the camera, and that you assume is what you get when you put it on the camera?

A. Yes.

X Q. 45. That is right, is it?

A. Yes.

X Q. 46. Now, what percentage is that? I think you told us, but tell us again.

A. 1.2 per cent.

X Q. 47. What is the average selling price of those cameras that you are dealing with?

A. That is the question you just asked. I said approximately $9 apiece.

X Q. 48. Oh, I meant to ask you the average cost of production of the cameras?

A. About $5.40.

X Q. 49. Mr. Thomas, you mentioned a figure which you said was the profit, according to your calculation, on the sale of cable releases, of $73,000?

A. Yes.

X Q. 50. Did that include the releases sold abroad?

A. Yes, it did.

X Q. 51. A very large part of the product goes abroad, does it?

A. About a third of the cable releases.

JOSEPH E. SIEGFRIED, sworn.

Direct examination:

Mr. Davis: Maybe it will help the jury if I say now that Mr. Siegfried is called to identify certain drawings which will be testified about later by another witness. It is more or less formal testimony.

[fol. 115] By Mr. Davis:

Q. 1. Mr. Siegfried, you are connected with the Eastman Kodak Company at Rochester, New York?

A. Yes.

Q. 2. In what capacity?

A. Draftsman in the camera works, Eastman Kodak Company.

Q. 3. How long have you been there?

A. I have been in the employ of the company for twenty-six years, in the drafting room 18.

Q. 4. Mr. Siegfried, I show you a photostat of the Eastman Kodak Company's drawing No. 14511, which has heretofore been offered in evidence on behalf of the plaintiff as Plaintiff's Exhibit 26. Can you tell us whether you know when that drawing was first made?

A. April 14, 1917.

Q. 5. How do you know that?

A. By the date after the initials of the man that drew it.

Q. 6. Did you check the drawing at the time it was made?

A. I did, for details and date.

Q. 7. And are your initials on the drawing?

A. They are, J. E. S.

Q. 8. When did you put them there?

A. Possibly the same date that the drawing was made.

Q. 9. After checking the drawing?

A. After checking the drawing.

Mr. White: That is the drawing of the closed inner member?

Mr. Davis: That is the drawing of the closed coil inner member.

[fol. 116] By Mr. Davis:

Q. 10. I show you the Eastman Kodak Company's drawing No. 15131. Can you tell us what that is a drawing of?

A. A drawing of an open wound spring casing.

Q. 11. When was it made?

A. May 8, 1918.

Q. 12. And did you check it at that time?

A. I did.

Q. 13. Are your initials on it?

A. My initials on it, checked by J. E. S.

Mr. Davis: I offer that in evidence.

(Eastman Kodak Company drawing No. 15131 designated as Defendants' Exhibit No. 3.)

By Mr. Davis:

Q. 14. I show you a print photostat of the Eastman Kodak Company, drawing No. 15132; will you tell us what that is a drawing of?

A. That is an assembly drawing of several cable releases.

Q. 15. That is you mean it is an assembly drawing that illustrates the construction?

A. Illustrates the construction of several different number of cable releases.

Q. 16. When was that made?

A. That was made May 14, 1918.

Q. 17. Did you check it at that time?

A. I did.

Mr. Davis: I offer that in evidence.

(Photostat print of Eastman Kodak Company drawing No. 15132 designated as Defendants' Exhibit No. 4.)

By Mr. Davis:

Q. 18. There is written on that photostat, Mr. Siegfried, in white pencil, the words, "change No. 477, 5/11/20," and [fol. 117] then off at the right, in white pencil, No. 15297. Can you tell us what those marks mean?

A. Whenever we receive a drawing from the drafting room for a change, that drawing or a print is taken from the drafting room file, and marked with the number of that change, which appears on the slip that calls for that change.

Q. 19. What was the change that is called for by this number 477?

A. That is not on this print. It would appear on a future print, a white drawing, the original drawing.

Q. 20. Can you not tell from the print what the change was?

A. No, because it is not on this. This — a reference print or a record print. That number will appear on the drawing, the original drawing.

Q. 21. I show you another drawing, which is No. 15132. Is that the original drawing?

A. That is the original drawing; yes, sir.

Q. 22. Now, can you tell from that what this change No. 477 was?

A. Yes. It was the addition, or the change, rather, of a part number only, no constructional change.

Q. 23. That is the drawing itself was not changed at all?

A. The drawing itself was not changed by that change number.

Q. 24. Merely changed the——

A. Number of an assembly. That is just simply an assembly number change.

Q. 25. That is, it changed the number at the end of the top line of this list of numbers which appears immediately above the box in which your check is made; is that right?

A. Yes.

[fol. 118] Cross-examination.

By Mr. White:

X Q. 26. Mr. Siegfried, I understand this drawing is a drawing of a cable release which was originally made in 1918, May 14th?

A. Yes, sir.

X Q. 27. I see noted on here that at certain times certain changes were made. That is as noted on the copy, I suppose?

A. Yes.

Mr. Davis: May it be noted on the record that counsel is referring to the original drawing No. 15132?

Mr. White: That is right.

By Mr. White:

X Q. 28. Now, Mr. Siegfried, won't you tell us whether or not there is in your record a specification, what we might call a master specification, bringing together the various parts of a cable release?

A. I believe there is.

WILLIAM H. ZIMMER, sworn.

Direct examination.

By Mr. Davis:

Q. 1. Mr. Zimmer, you are connected with the Eastman Kodak Company at Rochester, New York?

A. I am.

Q. 2. In what capacity?

A. I am acting as an assistant to the production manager.

Q. 3. How long have you been with them?

A. 1911.

Q. 4. Has the Eastman Company a system by which it issues instructions for and keeps records of the designs of [fol. 119] the parts which it manufactures and changes in those designs?

A. They have.

Q. 5. And will you tell us how that system originates, the first design, of a particular thing like a cable release?

A. The instructions were issued in the form of a pink note, which was sent to all the manufacturing departments, announcing the manufacture of any new product that the company has decided to begin, and usually relating the details of the tool equipment and the dates or the order numbers on which the manufacture should begin.

Q. 6. And those pink slips are given a serial number?

A. They were given a serial number.

Q. 7. Now, suppose you afterwards make a change in that construction. How do you number the pink slip which initiates the change?

A. The change was given an alphabetical series. The original note would go out under a number, and any changes on that particular item would be an alphabetical change, an a, b, or c note issued later.

Q. 8. I show you a pink slip which has a tab on it with the number 91, dated July 19, 1917. Can you tell us what that is?

A. Yes. This is an announcement to the heads of all camera works departments that a new model cable release has been designed.

Q. 9. Did you issue that yourself?

A. Yes.

Q. 10. What date?

A. July 19, 1917, this note was written.

Mr. Davis: I read this pink slip to the jury, as follows:

"New model cable release has been designed using a wire [fol. 120] wound cable, and new part lists have been written up on the No. 2-7 inch, No. 13-3 inch, and No. 16-9 inch. A special machine is necessary for winding the new spring cables. This is now in course of construction and when this is received instructions will be issued to begin manufacture of the new release."

By Mr. Davis:

Q. 11. Now, I show you another slip with the mark 91a, dated August 13, 1917. Can you tell us what that is?

A. Note 91a, dated August 13th, specifies the orders on three different sized releases, on which this new model was to be applied or used.

Mr. Davis: I offer this slip in evidence.

(Pink slip No. 91a designated as Defendants' Exhibit No. 5.)

Mr. Davis: I will read this to the jury: "Referring to change note No. 91, dated July 19th, regarding new model cable release for the No. 2-7 inch, No. 13-3 inch, and No. 16-9 inch, special machine for winding the new spring cable has been received, and tool equipment completed, to make the new releases. The change takes effect as follows: No. 2—on 6561," and following that, in ink, "Foll. 6528 No. 13-Foll. No. 6529. No. 16-Foll. No. 6348."

I also now offer in evidence the first pink slip referred to, marked No. 91.

(Pink slip No. 91 designated as Defendants' Exhibit No. 6.)

By Mr. Davis:

Q. 12. Now, will you tell us how you find out from these pink slips, or from your system, what the change was that was authorized by the slip? How do you identify that change?

[fol. 121] A. The change authorized a change in the construction of a product. It usually meant the ordering of tool equipment, changing layout of operation sheets, and

specifying the order numbers on which the change was to take effect.

Q. 13. And those order numbers meant the orders for manufacture of the releases in which the change was to take effect?

A. Right.

Q. 14. So that this notation on the slip marked 91a, No. 2 on No. 6561 meant that the change was to take effect on Order No. 6561 for the manufacture of No. 2 releases?

A. Yes.

Q. 15. And then, by tracing through to that order for No. 2 releases, you can find out what drawings referred to that order number, is that right?

A. Yes. There is a list of parts prepared for each product, in this case each cable release would have a list of parts that made up that release, and the orders would be issued to the factory on the basis of that list of parts.

(Recess from 1 to 2 o'clock P. M.)

After Recess

WILLIAM H. ZIMMER, resumed.

By Mr. Davis:

Q. 16. Before luncheon, Mr. Zimmer, you referred to these pink slips 91 and 91a, which authorize the change of the innermost member of the release from straight wire to a closely wound wire coil, and it appeared that this set 91a referred to order No. 6561 as the order for No. 2 releases [fol. 122] on which this change should go into effect. Do your records show when these No. 2 releases with the change were first manufactured—the date of completion——

A. Yes, sir; we have a record showing the date issued and completed.

Q. 17. I show you a sheet of paper which is labelled "Cost Analysis No. 2, 7 cable releases," does that sheet show when the order was completed?

A. It shows when the order No. 6561, when it was ordered and when it was completed.

Q. 18. What date was it ordered and on what date was it completed?

A. Ordered on August 15, 1917, and completed November 9, 1917.

Mr. Davis: I ask that this sheet be marked for identification.

(Paper in question marked for identification Defendants' Exhibit No. 7.)

By Mr. Davis:

Q. 19. I want to come to the question of when the outer coil or facing was changed from a closely wound coil to a coil with open convolutions, and I show you pink slip No. 333. Did you issue that slip?

A. Yes, sir; that was issued by my department.

Q. 20. When?

A. April 27, 1918.

Q. 21. Can you read that slip to the jury?

A. Yes. "Change is being made in all of the spring casings used on our cable releases, same being open wound instead of close wound as at present. New Part lists are being written up for all the releases excepting No. 17 and 18, which are for Wollensock Optical Company. These new lists are to be used on all local orders for releases, the present lists being reserved for London orders only until [fol. 123] June 26, 1919, when we can safely ship the new releases to Europe without infringing on English patents. Great care must be exercised to see that any releases shipped to Europe before the date above mentioned have a close wound casing. Change takes effect on all new orders in works."

Mr. Davis: I offer that in evidence.

(Paper referred to marked Defendants' Exhibit No. 8.)

By Mr. Davis:

Q. 22. I want you to identify for us through your records the drawing that was used to build the parts in which that change was embodied, so that we can find out when the drawing was made and what change was made exactly in this open coil, and I hand you this yellow list. Will you tell us what it is and where it came from?

A. This yellow sheet is a list of parts to make one complete No. 2-7 inch cable release and it gives the various part numbers after the parts composing that release.

Q. 23. What is the date of it?

A. The date here is May 14, 1918.

Q. 24. Where did it come from?

A. It was prepared in my department through the operation of the previous pink note 333—in connection with that note.

Q. 25. Will you tell us by reference to that sheet what the drawing numbers, or what was the drawing number for the open coil casing?

A. This sheet calls for spring casing No. 15131, made of No. 30 brass wire.

Q. 26. That is the drawing 15131 that has been put in evidence as Defendant's Exhibit No. 3, which I now show you, is that right?

A. That is correct.

[fol. 124] Q. 27. Does that yellow sheet give the drawing number of the cable, that is the innermost member?

A. Yes, sir; that gives the number as 14511.

Q. 28. That is the drawing 14511 which has been put in evidence here this morning by Mr. Siegfried?

A. Yes, sir.

Q. 29. And which I now show you?

A. Yes, sir.

Mr. Davis: I offer in evidence the yellow sheet that the witness has been referring to.

(Paper above referred to marked Defendants' Exhibit No. 9.)

By Mr. Davis:

Q. 30. Now, will you refer back to this cost analysis sheet, which is marked for identification Exhibit No. 7, and locate on it the first order that was put through the works, embodying the changes of this pink slip No. 333, and tell us what that order number was and when it was put into work and when it was completed?

A. According to note 333 all of the orders after April 29th would have the new open wound casing. This sheet shows that order 7581 issued June 4, 1918, the first order after that date of April 29th.

Q. 31. When was that order completed?
A. It was completed December 20, 1918.

Cross-examination.

By Mr. White:

X Q. 32. Mr. Zimmer, what form is this yellow sheet on?
A. That is a part list, list of parts, which is prepared to manufacture camera works products.
X Q. 33. Is it designated by a form number?
A. A form number?
X Q. 34. Yes.
[fol. 125] A. It may have a form number; I don't just recall.
X Q. 35. Will you look and see, please?
A. (Referring to paper:) Form No. 140.
X Q. 36. In your organization what does Form No. 140 really mean—what is that?
A. That is a list of parts composing the product, containing the specifications of material, part numbers.
X Q. 37. It is a sort of master's specification, from which the various orders are made up?
A. Yes, sir.
X Q. 38. What is the date of that one?
A. May 14, 1918.
X Q. 39. That is for No. 2—7-inch cable release?
A. Yes, sir.
X Q. 40. I show you a photostatic copy of a similar form taken from your records, which is dated May 27, 1918. I will ask you if you recognize that as a photostatic copy of your list of parts on Form 140 for that same cable release about which you have just been speaking?
A. Yes, sir.
X Q. 41. How do you explain the fact, which appears to be the fact, that the one which I have just shown to you, which is dated six days later than the one which you produced, contains different specifications?
A. The difference here—one of the differences here is that I see a difference in the part number of the spring casing.
X Q. 42. What is the part number of the spring casing on the photostatic copy that you have in your hand?
A. 9507.

X Q. 43. I show you drawing 9507 and ask you if that is the drawing, a photostatic copy of it?

A. Yes, sir.

[fol. 126] X Q. 44. That shows a closed spring casing, and not an open spring casing, doesn't it?

A. Closed spring casing.

X Q. 45. I notice the yellow sheet you have in your hand seems to have a mark across it. What does that indicate, if anything?

A. You mean these red marks?

X Q. 46. Yes.

A. That means that on May 22, 1918, this sheet was discarded or became obsolete and a new sheet was written up.

X Q. 47. Then the new sheet that was written up is the one of which you have a photostatic copy in your hand, isn't it?

A. That is very possible.

X Q. 48. Why didn't you produce that, Mr. Zimmer, before this jury—why did you bring the one that has been discarded and not the one that was in effect?

A. I didn't know of this one.

Mr. White: I ask to have marked for identification drawing No. 9507, which has been identified by the witness.

(Drawing in question marked Plaintiff's Exhibit No. 39.)

By Mr. White:

X Q. 49. In view of this revised list of parts, it is a fact, is it not, that the subsequent orders for the No. 2 cable releases would follow this list of parts, which I have just handed you?

A. No, not necessarily.

X Q. 50. They would not follow the discarded list, of course, would they?

A. There may have been a new list, a revised list at that time.

X Q. 51. Do you know when the next revised list was put in, which did show an open spring casing surrounding a closed inner spring casing?

[fol. 127] A. No, I do not.

X Q. 52. Perhaps I can help you. I show you a photostatic copy of another similar record on Form 140 from your department, dated March 12, 1920, and ask you if

that is not a photostatic copy of a similar specification or list of parts for cable release No. 2?

A. Yes, sir.

X Q. 53. That is correct, isn't it?

A. It is correct for that date.

X Q. 54. Will you tell me what the drawing number is on that specification of March 20, 1920, for the outer spring casing?

A. 15131.

X Q. 55. I show you drawing 15131, which shows an outer spring casing. That is the drawing, is it not—a photostatic copy of it?

A. It is.

Mr. White: I ask that this be marked for identification.

(Drawing in question marked Plaintiff's Exhibit 40.)

Mr. Davis: That is already in evidence as Defendants' Exhibit No. 3.

By Mr. White:

X Q. 56. Mr. Zimmer, having in your one hand specification for parts No. 2, under date of May 27, 1918, showing the outer closed coil spring, and in your other hand a specification of March 20, 1920, showing the open spring casing, I will ask you whether or not it is a fact that that is the date when the open spring casing was adopted for use in connection with an inner closed spring casing by your company?

A. I can not say as to the exact date.

X Q. 57. Are you able to produce any specification or list of parts between those dates, which shows any different [fol. 128] or other arrangement of parts for cable release No. 2?

A. I am not sure whether we have any more lists here or not.

Mr. White: I ask to have marked for identification these two lists of parts or specifications for cable release No. 2, one dated May 27, 1918, and the other dated March 12, 1920.

(Lists in question marked Plaintiff's Exhibits Nos. 41 and 42.)

By Mr. White:

X Q. 58. Let me ask you this question—it is very clear from an examination of the list of parts dated May 27, 1918, and the drawing accompanying the same, is it not, that the spring casing used in the list of parts was a new spring casing shown by drawing No. 9507?

A. That is the number that appears on this list.

X Q. 59. It is quite clear equally that at some time in between that date and the date of March 12, 1920, a decision had been reached to put in a spring casing, such as is represented by drawing No. 15131—that is clear?

A. It is not clear to me.

X Q. 60. It is quite clear, is it not, that any cable releases under the No. 2 type, manufactured under the list of parts you have in your hand, would have a closed outer spring casing, would they not?

A. Yes, sir; any release manufactured under this specification.

X Q. 61. Any manufactured under the later specification would have an open spring casing?

A. Yes, sir.

X Q. 62. Then there must have been a decision in between those dates to make a change—do you agree to that?

A. Provided this is the official list.

[fol. 129] X Q. 63. Do you have any question about it?

A. I still think this is the correct list.

X Q. 64. You think the earlier date, which you said a moment ago had been discarded in May, 1918, is the correct list?

A. This one here?

X Q. 65. Yes.

A. Yes, sir.

X Q. 66. You choose that over the one later in date, which has not been discarded?

A. Yes, sir.

X Q. 67. May I see this yellow sheet? Have you any reason to suggest why the number opposite the word spring casing on this yellow sheet should be in lead pencil and all the rest in ink—that is true, isn't it?

A. It is true. When these lists were prepared, I might say, the original list of parts was prepared on a typewriter without any part number, on account of the number of releases which were manufactured, and then the part num-

bers were filled in later, in accordance with the various sizes.

Mr. Davis: Counsel asked if there were any more of these sheets in the intervening dates. I have spoken to my associates here and they have handed to me so far two, which I show you. The first one is dated 5/20/1918, and it shows that the spring casing sheet 9507, which is the closed coil casing, stricken out in pencil, and the number 15131 replacing it. And in the other, which is dated May 21, 1918, it shows that the cable releases complete, drawing No. 15132, which is the drawing which was put in evidence, and it shows release having an inside tiglitly wound coil and an outside loosely wound coil, and the number for the spring casing itself is 15131.

[fol. 130] By Mr. White:

X Q. 68. Do you know anything about this of your own knowledge, or simply from the records?

A. I would say from the records. That is too far back.

X Q. 69. Your counsel has just produced a similar form or list of parts, which has the same date as the one of which I handed you a photostatic copy, May 27, 1918, and which contains the same number 9507 for the outer casing, which is the closed coil. Do you know anything about how it happened that this was stricken out by lead pencil and another number written over it, before it was brought here?

A. No, sir.

X Q. 70. Did you have anything to do with giving a photostatic copy of that document, or a similar document, to Mr. Edelson, when he was in Rochester a few weeks ago?

A. No, I didn't see Mr. Edelson.

Mr. White: I call upon counsel for the original, if they have it, of this list of parts, which has just been marked for identification, dated 5/27/1918.

By Mr. White:

X Q. 71. Mr. Zimmer, your counsel has produced at my request the original copy of this document, of which I gave you a photostatic copy, dated May 27, 1918, six days later than the yellow sheet which you showed me. Why didn't

you produce this one instead of the other one which has been discarded, or didn't you know about it?

A. No, I didn't know about it.

X Q. 72. Having seen the two, are you prepared now to say that the earlier one is to be considered as the one in effect, rather than the other later one which you now have in your hand?

[fol. 131] A. This appears to be authentic enough.

X Q. 73. It is dated the 27th of May?

A. Yes, sir.

X Q. 74. It specifies the outside casing as No. 9509, does it not?

A. 9507.

Mr. White: I would like to have that marked for identification.

(Paper in question marked Plaintiff's Exhibit 43.)

Mr. Davis: I will ask that there be marked for identification a bunch of six of these yellow sheets, which were produced and handed to counsel for plaintiff, and among which are the two to which I referred.

(Six yellow sheets in question marked Defendants' Exhibit No. 10.)

By Mr. White:

X Q. 75. Mr. Zimmer, are there any statements or specifications, and if so I should like to have them produced, between the one dated May 27, 1918, and the one dated March 20, 1920, for No. 2 cable release?

A. I don't know of any other than these.

Newton M. Perrins, recalled.

By Mr. Davis:

Q. 6. Mr. Perrins, I hand you a letter, stamped Eastman Kodak Company, addressed to C. L. Jenks, main office, signed J. A. Robertson, dated April 12, 1916. Can you identify that?

A. I know the signature of Mr. Robertson.

Q. 7. Do you know where that came from?

A. That letter came from the files of the patent department of the Kodak Company.

[fol. 132] Q. 8. Is Mr. Robertson alive?

A. He is not.

Q. 9. Who is Mr. Jenks?

A. He was the head of the patent department. He resigned in 1916 or 1917, before I came to the company.

Q. 10. He is no longer with the company?

A. No, he is not.

Q. 10a. Do you know his whereabouts?

A. No, I do not.

Mr. Davis: I offer that letter in evidence.

(Letter above referred to marked Defendants' Exhibit No. 11.)

Mr. White: I have no objection.

(Defendants' Exhibit No. 11 read to the jury by Mr. Davis, as follows:

"Rochester, N. Y., April 12, 1916.

Mr. C. L. Jenks, Main Office.

DEAR SIR: Some time ago in discussing with you the cable release, situation, I explained to you the advantage of having an open flexible spring instead of a close wound one. I am sending you four cable releases, two long and two short. One of each is made with an open spring. Nobody will have any difficulty in determining which is which. I am also sending you sample of each of ehe springs.

I wish you would send these to J. T. Clarke and advise him that we are having a good deal of breakage and defective cable releases on account of the closely wound spring. Wish you would get his opinion as to whether we can safely manufacture them this way and send them to Europe. At [fol. 133] the same time, wish you would investigate whether we can make them in this country, and would like your advice on this just as soon as possible.

Very truly yours, J. A. Robertson.")

By Mr. Davis:

Q. 11. Do you know who J. T. Clark was?

A. Mr. Clarke was the patent representative of the Kodak organization in England and had charge of the patent affairs in England and European countries.

Q. 12. Before we go further with that English situation, I ask you if you can identify this letter, stamped Eastman Kodak Company, dated December 24, 1915, to Mr. C. L. Jenks, Main Office, signed J. A. Robertson, and tell us where it came from.

A. This came from the records of the patent department, and I recognize the signature of Mr. Roberts.

Mr. Davis: I offer that letter in evidence.

(Letter in question marked Defendants' Exhibit 12.)

Mr. White: I have no objection.

(Defendants' Exhibit 12 read to the jury by Mr. Davis as follows:

"Rochester, N. Y., Dec. 24, 1915.

Mr. C. L. Jenks, Main Office.

DEAR SIR: I am sending you herewith cable release in which the push cable is made of wound spiral coil, same as the casing. This is much more flexible than the cable we have in use. The suggestion came from one of our em- [fol. 134] ployees, Ed. Dakin, on August 13, 1915. We made up a thousand of these cables and they work satisfactorily.

I wish you would look this up and see if this feature is patentable or whether there is anything to prevent our using it.

You might also, as soon as possible, advise me on the chain proposition for the same purpose which I submitted to you some time ago.

Very truly yours, J. A. Robertson.")

By Mr. Davis:

Q. 13. Do you know, Mr. Perrins, whether a patent application was filed by Mr. Dakin, or by him and another, which illustrated a cable release having a closely wound spiral push cable and a closely wound casing surrounding it?

A. Yes, sir; one was filed.

Q. 14. That application was filed on what date?

A. Referring to this paper, it was filed on October 15, 1917.

Mr. Davis: It is stipulated by counsel for plaintiff that the application was filed in the Patent Office on October 15,

1917, and contained the same disclosure which is now filed in the patent, which is Patent No. 1,297,327, and which is offered in evidence.

(Paper last offered in evidence marked Defendants' Exhibit No. 13.)

Mr. Davis: It is further stipulated on behalf of the plaintiff that the patent disclosure is a disclosure of the structure of the cable release that was sent by the Eastman Kodak Company to Mr. Gray—is represented to be what they were manufacturing prior to the time he called attention to his idea.

[fol. 135] It is stipulated that the release which I now produce is one of the releases that was sent by Mr. Robertson to Mr. Jenks in the Kodak plant, with the letter of April 18, 1916, and of which he says, "one of each is made with an open spring." This cable release has wire inside. That is the straight wire, not the coil.

By Mr. Davis:

Q. 15. Mr. Perrins, I show you a letter, Eastman Kodak Company, December 12, 1917, addressed to Mr. G. A. Riggs, Camera Works, signed R. L. Stinchfield, and initialled N. M. P., and in pencil on it is written your name, Perrins. Can you identify that letter?

A. Yes. This is a letter which I wrote and initialled and Mr. Stinchfield signed, on the date given. Mr. Stinchfield was at that time the head of the department.

Mr. Davis: I offer the letter in evidence.

(Letter referred to designated as Defendants' Exhibit No. 14. It was read to the jury by Mr. Davis, as follows:

"Eastman Kodak Company

Rochester, N. Y.,
December Twelfth, Nineteen Seventeen.

Mr. G. A. Riggs, Camera Works.

Dear Sir: This is to confirm our conversation of yesterday concerning the proposed new metallic cable release. It was suggested that instead of having the outer coil or sheath wound closely for its entire length that a portion at or near each end be coiled more loosely with the convolutions spaced

one from another. This would give the advantage of the [fol. 136] separated convolutions at the points where the greatest wear comes and where the greatest need for flexibility exists.

The question of infringement remains the same in this country as it did at the time of the reports of Messrs. Church & Rich on Mar. 9, 1914 and July 14, 1916 when a tightly coiled sheath and a loosely coiled sheath, respectively, were discussed, and in each case it was held these could be made without infringement of the nearest U. S. patent No. 828,815. As long as this terminal spring in the present suggested structure is used purely as a sheath, this patent would not be infringed, as you stated this would not be used as the actuating spring for the button. If such a use were contemplated, this patent undoubtedly would be infringed, but we understand that this is not at all contemplated.

As to the infringement of British patent No. 13,157 of 1905, we are in considerable doubt. It will be recalled that the sheath closely wound throughout its entire length did not infringe any British patent, but that the sheath with separated convolutions throughout its entire length was considered to infringe this British patent. We would not care to state, with any degree of confidence, whether or not the new suggested sheath would infringe this British patent in which the claim states that 'the outer member consisting of a coiled wire is formed wholly *or mainly* with said coils other than touching one another on the abutting faces thereof.' In the suggested sheath the greater proportion of the length is closely wound, so in this sense it is not made 'mainly' with the separated convolutions. However, it is made with the separated convolutions at the places of the greatest importance, and we are unable to [fol. 137] state how this claim would be interpreted. This question will be submitted to Mr. J. Thacher Clarke. This particular arrangement is novel in this country, but the results obtained are so similar to that of the British patent that it is of doubtful patentability. However, if it is to be used commercially, it undoubtedly would be the part of wisdom to apply for a patent.

Summary

The proposed sheath does not infringe any U. S. patents. The situation as regards the British patent is doubtful

and will be referred to Mr. J. Thacher Clarke. If it is to be made commercially, a patent application should be filed.

Yours truly, R. L. Stinchfield, Patent Attorney.

Copy to Mr. Robertson.")

By Mr. Davis:

Q. 16. Now, Mr. Perrins, will you tell us what this question was that was to be referred to Mr. J. Thacher Clarke?

A. We had had under consideration for some time the making of a cable release with a loosely wound outer coil. Mr. J. Thacher Clarke had reported that it would infringe a British Edwards patent. Mr. Riggs asked me in a personal interview whether it would still infringe that patent if only a portion of the outer wire were made with the spaced convolutions, and this letter was in response to that suggestion, and we reported as stated that it would not infringe on the patents. But I did not know what it would be in England, and would refer the matter to J. Thacher Clarke.

[fol. 138] Q. 17. In other words, you reported that you could make that device with the loose coil sheath in the United States?

A. Yes.

Q. 18. Without infringing any United States patent?

A. Yes.

Q. 19. But when it came to selling them in England, there was a patent in England to Edwards which might be infringed by it?

A. That is true.

Q. 20. And what did Mr. Clarke report on that?

A. He reported that the British patent would not be avoided by this suggestion, that the suggestion would also infringe the British patent.

Q. 21. And the result of that was that the Eastman Kodak Company could not ship these cable releases with the open coil into England without infringing someone's patent in England, is that right?

A. That is true.

Q. 22. Did that have any effect on the policy of making the open coil sheaths in this country?

A. Yes, it did. It was brought up several times, and as we shipped products to all countries, we have to have a

uniform product that is free everywhere, so we postponed for some time the approval of that cable release.

Q. 23. That is, as I understand it, you wanted all your cable releases to be made so that you could ship any of them to any country without distinguishing, is that right?

A. That is correct.

Q. 24. And so, for that reason, you postponed what could have been manufactured in the United States without violating anybody's right, until it could be sold in England without violating the right?

A. That is what we advised them, yes.

[fol. 139] Q. 25. And when did that English patent expire?

A. I believe it was 1919. I am not absolutely certain. Can you give me the number of it? It was a 1905 patent, wasn't it?

Q. 26. It was a 1905 patent.

A. It would expire in 1919, then. A British patent has a fourteen-year term.

Q. 27. And after that British patent expired, the company was free to ship them into England and adopted the open coil, is that right?

A. That is true.

Q. 28. I call your attention to the pink slip No. 333, which has been put in evidence during the testimony of Mr. Zimmer, and I will read from it this sentence, "New part lists are being written up for all the releases except Nos. 17 and 18, which are for Wollensak Company. These new lists are to be used on all local orders for releases, the present lists being reserved for London orders only until June 26, 1919, when we can safely ship the new releases to Europe without infringing on English patents." Will you say whether or not that reference on this pink slip is to the British patent situation that you just described to the jury?

A. It was.

Cross-examination.

By Mr. White:

X Q. 29. Mr. Perrins, in order that there may be no error in the understanding of this matter, I will ask you whether it is not so that the cable which you sent, or which was sent to Mr. Jenks rather, by Mr. Robertson, in his letter of

December 24, 1915, was a cable which had a wire inner thrust member?

A. I believe it was, yes. It is right here.

X Q. 30. And in the letter of April 12, 1916, by Mr. Robertson to Mr. Jenks, where reference was made to a flexible instead of a close wound spring for the outer member, [fol. 140] that cable release also had a wire thrust inner member, did it not? That had a twisted wire thrust member and a closed coil casing, as I understand it?

A. They were both closely wound, yes.

Mr. Davis: It is stipulated between counsel that if Mr. H. F. Hoefle were called as a witness, he would testify that from the years 1907 to 1914 he imported into this country from abroad large quantities of cable releases known as the Watson or Watson and Edwards cable releases, which were manufactured in accordance with the disclosure of a British patent to Edwards and Watson which is numbered 5741 of 1906, and that the cable release produced is of the type which he imported during those years, and the cable release is offered in evidence.

(Cable release referred to designated as Defendants' Exhibit No. 15.)

Mr. Davis: The structure is a straight wire inner cable, what they call a stranded wire, not a coiled wire, with an open coiled outer casing. The jury will see that patent drawing later, and then I will recall it. I will offer two of these cables which were produced by Mr. Hoefle.

JOHN CHRISTY, sworn.

Direct examination.

By Mr. Davis:

Q. 1. Mr. Christy, you are employed by the Eastman Kodak Company at Rochester, New York?

A. I am.

Q. 2. In what capacity?

[fol. 141] A. General foreman in charge of drafting and experimental work.

Q. 3. How long have you been with them?

A. Since 1913.

Q. 4. Were you familiar with the type of cable release that they manufactured in 1913?

A. I was.

Q. 5. That cable release manufactured in 1913 is shown on this drawing No. 9511, and it has a straight wire push member and a closed coil casing, is that right?

A. That is right.

Q. 6. And it has a spring which is marked on the drawing 9499 for pushing the push button out to its extreme limit?

A. That is right.

Mr. Davis: I offer the drawing in evidence.

(Drawing No. 9511 designated as Defendants' Exhibit No. 16.)

By Mr. Davis:

Q. 7. Did you remain with the Eastman Company continuously from 1913 to date?

A. The latter part of December, 1917, I enlisted in the army, and was discharged and returned to work at Eastman Kodak in May of 1919.

Q. 8. When you went to the war, what type of cable release was the company manufacturing?

A. They were manufacturing the close wound outer casing and the close wound coil cable.

Q. 9. Before you went to the war they had substituted the close coil inner cable for straight wire cable?

A. That is right.

Q. 10. And when you came back from the war what were they manufacturing?

A. They were manufacturing the spaced open wound outer casing and the close coil cable.

[fol. 142] Q. 11. That is the present construction?

A. Correct.

Q. 12. Can you tell us the purpose and effect of these changes in the construction of the release?

A. Each change was an attempt to obtain a more flexible cable release.

Q. 13. That is the coiled push member or cable was more flexible than a straight wire cable, is that right?

A. It was.

Q. 14. And the open coil casing was more flexible than the closed coil casing?

A. It was.

Q. 15. I am going to call your attention to the British patent to Edwards, No. 5741 of 1906. Have you read that patent and do you understand it?

A. I have.

Q. 16. I am asking you to direct your attention particularly to Figure 2. That drawing Figure 2, is described in the printed specification of the patent, and that printed specification refers to each one of these reference letters that appear on the drawing; is that right?

A. Yes.

Q. 17. Is that patent and the thing illustrated in the Figure 2 a camera release for cameras such as we have been discussing here?

A. It is.

Q. 18. It is in fact the very camera release that is embodied in this exhibit, Defendants' Exhibit 15, that has just been offered in evidence, is it not?

A. It is.

Mr. Davis: This is a release of that patent described in the patent in England in 1906, made and shipped into this country, as has just been stipulated.

Mr. Edelson: That is the one having the wire cable?

[fol. 143] Mr. Davis: Yes.

By Mr. Davis:

Q. 19. Now, Mr. Christy, I am going to ask you to follow that drawing, and I am going to read to you the claim, the first claim of the plaintiff's patent, Mr. Gray's patent, and as I read each element of that claim, I want you, if you can, to point out and give the reference letter that applies to the corresponding element in this British patent.

The Court: Now, you are reading from which claim?

Mr. Davis: This is the first claim of the patent in suit.

By Mr. Davis:

Q. 20. The combination of two heads—that is the first element. Now, do you find those two heads in the British patent?

A. I do.

Q. 21. What are they on that drawing?

A. They are designated as capital A on one end and capital B on the other.

Q. 22. The next element is a barrel on the outer head. Do you find that in the Edwards patent?

A. I do.

Q. 23. What is it?

A. It is shown as small f.

Q. 24. It is a metal sleeve that is fastened to part of the outer head and lies inside of the flexible fabric casing and surrounds the short spring, is that right?

A. That is right.

Q. 25. The next element of the claim is a coiled spring wire tube having spaced coils and being located between said heads and engaging said barrel. Do you find that element in the Edwards patent?

A. I do.

[fol. 144] Q. 26. What is it?

A. It is shown here by the letter small g.

Q. 27. The next element is flexible means joining said heads and definitely holding them at a fixed distance from each other while said spring wire tube is partially compressed endwise. Do you find that in Edwards?

A. I do.

Q. 28. What is it?

A. It is shown as a small b.

Q. 29. That is the outer fabric casing, that is black cloth, in this exhibit?

A. That is right.

Q. 30. The next element is a stem extending slidably through one of said heads and having limited outward movement. Do you find that in Edwards?

A. I do.

Q. 31. What is it?

A. The Letter L.

Q. 32. One of the jurors says that you are wrong, that it is K. K is right. Now, do you find a slide member in the other of said heads?

A. I do.

Q. 33. What is that?

A. The letter L.

Q. 34. And then do you find "and means intervening said stem and said slide member from the transmission of endwise motion from said stem to said slide member"?

A. I do.

Q. 35. What is that?

A. That is the small letter i.

Mr. Davis: Now, if the Court please, that is all of the elements of claim 1 of the patent, identified in the Edwards patent of 1906, and I am now going to the second claim of the patent.

[fol. 145] The Court: That is the same as claim 1, element for element, excepting an additional element which is in claim 2 that is not in claim 1, is it not?

Mr. Davis: That is right.

The Court: Can you not limit that then?

Mr. Davis: Yes. That is what we are going to do.

By Mr. Davis:

Q. 36. The additional element in claim 2 is, "yielding means for normally holding said stem at its outer limit." Do you find that in the Edwards patent?

A. I do. It is shown as the small letter a with an x over it.

Q. 37. Then do you find, Mr. Christy, in this British patent to Edwards of 1906 the same elements that are claimed in claims 1 and 2 of the plaintiff's patent, arranged in the same combination, for the same purpose?

A. I do.

Q. 38. Now, I wish you would look at a German patent to Wermann, No. 147,572, of May 28, 1902. Look at the drawing of that patent. In the first place, is that device shown in Figure 1 a cable release for photographic cameras or is it not?

A. It is.

Q. 39. And the details of construction are shown in Figure 2 in cross-section; is that right?

A. They are.

Q. 40. Now, I am going to read what the patentee said about it in 1902 and ask you to follow it. I am reading from the patent. He says, "Devices for transmitting pressure are known in which a transmission member is led through a tubular, non-compressible but flexible guiding member." Now, I will ask you if you understand what he

means by the transmission member there? That is, what has it been called in this trial?

[fol. 146] A. We have been calling it the cable.

Q. 41. And that is the inner member that sometimes is made of straight wire and sometimes is made of a coiled wire; is that correct?

A. Correct.

Q. 42. Now, this patentee in 1902 goes on, "as a transmission member, a wire cable or a row of abutting pins have been used. In order to increase the precision of the operation of devices of that type, there is used in accordance with the present invention as the transmission member a non-compressible wire spiral which is arranged within the guide member." Now, can you point out to the jury on that drawing this non-compressible wire spiral which in this patent is used as the cable?

A. Yes. It is shown in the drawing on Figure 2 and is lettered with a small d.

Q. 43. Is there any difference, Mr. Christy, between that coiled wire cable for a photographic release shown in that patent and the coiled wire cables that have been testified to in this cage and that are embodied at present in the Eastman Kodak Company releases?

A. There is not.

Q. 44. Now, I call your attention, Mr. Christy, to another British patent, to these same inventors, Edwards and Watson; that is the British Patent No. 15,645 of 1905. Does that patent also refer to this same general type of cable release for photographic cameras?

A. It does.

Q. 45. I am going to read to you from that patent, beginning at line 17 of page 1 of the specifications, and ask you to explain the language. The language is, "The inner most member"—what does the innermost member mean there?

A. That is the part that we have been terming the cable?

[fol. 147] Q. 46. And the patentee says, "may be formed of one or more wire or wires or of stranded wires or of wires held together by wire coiled round them or a closely coiled spiral." Do you understand that?

A. I do.

Q. 47. What does it mean to you?

A. In one case it means simply a single strand of wire of a certain diameter, and in another case it means a

braided wire, where a number of wires are braided together. In another case it means a single strand of wire with a closely wound coil of wire about it, tied to it, and the last case, it means simply a closely wound coil.

Q. 48. That is such a closely wound coil as is embodied in the Eastman Kodak Company's releases of present manufacture charged to be an infringement?

A. That is right.

Q. 49. Do you understand this man to be saying here in 1905 that in these devices, any one of those forms of cable may be used as the maker chooses?

A. I do.

Q. 50. Now, will you tell us whether or not the release illustrated in the drawings of that patent of 1905 contains an open coil outer casing, and if so, direct our attention to the picture or the drawing which shows it.

A. They do show an open wound outer casing, designated by the small letter b.

Q. 51. That is of Figures 1, 2 and 3; is that right?

A. Yes.

Q. 52. So that if you did use, in a structure made under this patent or in accordance with its disclosure, a closely coiled spiral for the thrust member, you would have a structure in which there was a closely coiled spiral thrust member surrounded by a casing of open coiled construction, which in turn was surrounded by this woven sleeve of fabric; is that right?

[fol. 148] A. I would.

Q. 53. Now, in that patent of 1905, the patentee goes on from where I stopped reading to say, "and is attached at one end to a push button or push piece—for example, passed at one end into the sleeve or shank thereof and there secured by compressing or denting said sleeve at one or more points." Do you understand that?

A. I do.

Q. 54. Is it illustrated in the drawing of the patent?

A. It is.

Q. 55. Will you point that out and explain it to us?

A. It is shown on Figures 1, 2 and 3 by the small letter d 1, down at the bottom of the sheet.

Q. 56. Will you please say whether or not that is the method of securing the sleeve or tip at the end of defendants' cables to the cables?

A. It is.

Q. 57. That is, the Kodak Company uses this exact method of fastening on the tip that was shown in this patent in 1905?

A. They do.

Q. 58. Can you illustrate that to the jury by reference to this exhibit release that was sent by the Kodak Company to Mr. Gray in 1918?

A. It is shown on this release here in this case by two indentations.

Mr. Davis: Defendants' counsel produces X-ray photographs which it is agreed by plaintiff's counsel are X-ray photographs taken of the structure of the plaintiff's release, and showing this indentation.

By Mr. Davis:

Q. 59. Is this indentation which you just referred to as being on the release itself, is that shown in this X-ray photograph?

[fol. 149] A. It is.

Q. 60. Where is it shown?

A. On the right-hand side, looking at the print, the lettering at the top. On the right-hand side, about two and a half inches in from the end.

Q. 61. It appears as a slight indentation in the metal?

A. Yes.

Mr. Davis: That photograph is offered in evidence.

(Photograph referred to designated as Defendants' Exhibit No. 17.)

By Mr. Davis:

Q. 62. Will you tell us whether or not the tips in the defendants' release, that is those releases which are charged to infringe and which contain coiled wires, are made so that they can be adjusted in length or not?

A. They are not.

Q. 63. Tell us how they are fastened together at the factory, and illustrate it, if you can.

A. The close coil cable is wound in long lengths, six or eight feet long, and it is cut to a definite length for the particular size release that is to be manufactured. The ends are made on a screw machine and are drilled with a

hole in one end to a definite depth. These two are assembled together in a fixture, the head being placed in the fixture first and the cable being pushed into the hole as far as it will go, to the end of the hole, and then a tool similar to a prick punch being brought down to give it a blow and indenting the prick punch, embossing, on these two together.

Q. 64. And does that result in all of them being made the same length?

A. It does.

Q. 65. And is that a permanent fastening together or not?

[fol. 150] A. It is.

Q. 66. The things are shipped that way and are not adjusted in the factory at all?

A. They are not.

Q. 67. Now, do you want to have these cables of different lengths for different releases?

A. The cables are made of different lengths for different releases, yes.

Q. 68. That is, some releases require a cable of one length and some of a different length, is that right?

A. That is right.

Q. 69. How do you take care of that in the factory? Do you adjust these things to make them different lengths?

A. We do not. When an order for one length of release is issued, the drawing for that order shows it being made a certain length, and they are cut off a proper length before they are assembled.

Q. 70. Then suppose you want for some other releases a different length, what do you do?

A. Well, your drawing will call for the length of the cable which is to be used on that particular release, and it is cut to the length of that.

Q. 71. And that is fixed by this fixture that you speak of that is set up in the shop?

A. Yes.

Q. 72. And are the tips of these releases all the same length or different lengths?

A. We have several different designs of tips.

Q. 73. What is the occasion for that?

A. So they can be used properly in different types of shutters.

Q. 74. Do different types of shutters require a different length of stroke, is that the idea?

A. They require a different length of stroke, and in some cases the operating lever in the shutter is in a dif-
[fol. 151] ferent position in relation to the outside of the shutter case, requiring different lengths of ends.

Q. 75. Now, I have picked up from the table here two of these defendant's releases that were put in evidence. This is cable No. 2, and cable No. 25. Can you illustrate what you just said about the length of the tip by those two cables?

A. Yes, I can. On cable release No. 2 we have a long straight tip, and on release No. 25 they have a short tapered tip.

Q. 76. That is to adapt the length of the throw of the cable to different shutters on different cameras?

A. That is right.

Mr. Davis: If your Honor please, I offer in evidence the binder of the patents; that is, the United States patent to Edwards, No. 828,815; the patent to Duryea, No. 1,072,439, which was shown to the jury yesterday as having a screw threaded adaptable connection referred to by the patent office examiner; the Bacon and Underwood Patent No. 1,297,327, which was referred to this afternoon; the British patents to Watson and Edwards, Nos. 13,157 of 1905, 15,645 of 1905, and 5741 of 1906; and the German patent to Wermann, No. 147,572.

(Folder of patents referred to designated as Defendants' Exhibit No. 18.)

Cross-examination.

By Mr. White:

X Q. 77. Mr. Christy, in your testimony as regarding the claim No. 1 in the plaintiff's patent, you testified that you found each element in another patent?

A. I did.

[fol. 152] X Q. 78. The last sentence or clause in said claim reads, "and means intervening said stem and said slide member for the transmission of endwise motion from said stem to said slide member, substantially as described." Your counsel did not read those last words,

"substantially as described." Now, I will ask you to look at Mr. Gray's patent and see if that means is not described on page 2, near the bottom, in these words, which I will read to you: "This mechanism comprises two important features. One of these is the closely wound coiled wire transmission tube, J, connected with the stem F, and the slide member i, whereby there may be transmission without lost motion. The other of these features is the forming of the outer coiled wire tube, c, in such manner as to permit bending the tube without material separation of the coils at the outer side of the curve, the spacing between the coils permitting the coils to approach each other on the inner side of the curve while the tube is being bent. The member, i, being free to slide, the adjacent end of the inner wire tube, J, is free to move endwise when the mechanism is being bent. In this manner the inner tube, although closely wound, adapts itself to the bending without kinking." You find that as a description of the means mentioned in claim 1, do you not, in the patent?

Mr. Davis: I object to that, if your Honor please.

The Court: I think that is all right as far as he has gone.

Mr. Davis: If the question is merely do you find that as a description——

The Court: Well, you have asked him about certain elements. Now, Mr. White is calling his attention to the fact [fol. 153] that that element set forth in the claim is the same element substantially described.

Mr. Davis: I see your Honor's point. I withdraw the objection.

By Mr. White:

X Q. 79. You do find that?

A. I do find that.

Mr. White: What patent were you comparing this with? What was the name of it?

Mr. Davis: The Edwards patent of 1906.

By Mr. White:

X Q. 80. Now, will you tell us if you find in the Edwards patent the means described as I have just read to you?

Mr. Davis: I object.

The Court: I will have to sustain that objection, Mr. White. It does not matter what is in the description parts of his application. Unless and until it is translated into a claim, he gets no patent for it. Now, the first question I admitted, and that was, as I interpreted it, merely this, is the element which is described in claim 1 the element that is also described by the descriptive words which you read from the application, and I understand the witness to say yes, I understand those to be the same thing. Now the question is, as far as the patent goes, what is described in the claim, not what is something else.

Mr. White: If your Honor please, as I understand the law—and I am a little bit out of my element in the patent law, and I have to defer to my friend and rely a good deal on my associate—but I have been furnished with cases which rule that where in a claim a means such as this is [fol. 154] described in general terms but concludes with the words "substantially as described," and the description is a definite one, that that serves to limit the claim and frequently make it valid where it otherwise would be invalid.

The Court: Well, undoubtedly the words "substantially as described" must be given a meaning; but after all, the patented thing is what is in the claim.

Mr. Davis: May I call your Honor's attention to what the Supreme Court said about that in the Morgan envelope case? I will read the syllabus. It fits this case exactly. "Where the patentee has once presented his claim in that particular form, as this patentee did, and the patent office has rejected it and he has acquiesced in such rejection, he is estopped to claim the benefit of his rejected claim or such a construction of his claim in the subsequently issued patent as would be equivalent thereto. The principle is the same if the rejected claim be narrower than the one allowed." And in the opinion the court says, "It is insisted in this connection, however, that in the words 'substantially as described' the patentee is entitled to claim a band of oval or oblong shape, and that, looking at his specification and drawing in connection with the claim, it is obvious that the latter should be so limited; but the patentee having once presented his claim in that form and the patent office having rejected it and he having acquiesced in such rejection, he is, under the repeated decision of this court, now estopped to claim the benefit of his rejected

claim or such a construction of his present claim as would be equivalent thereto." (Citing cases.) "It is true that these were cases where the original claim was broader [fol. 155] than the one allowed, but the principle is the same if the rejected claim be narrower."

The Court: Well, that has become the understood law, that it is not what the man asks for but it is what he gets that controls. But for your purposes, what difference does it make? This witness has said that he understands the phrase that refers to this element in the claim to be exactly the same thing as he understands to be described in the application. So, if they are the same thing, what difference does it make? We are talking about mere words. The thing is the same, so you can address to that any question you please.

Mr. White: Well, my point was that in a case of this sort you read into the claim the description, and there is authority for that, if the Court please.

The Court: No; but substantially as described.

Mr. White: Yes, and therefore instead of just saying means, which you could not patent——

The Court: Well, the witness has already said that he understands that different language to refer to the same element. He has told us that. So what difference does it make in what words you describe it? You see, patents patent things; they do not patent words.

Mr. Davis: That closes our case.

Defendants rest.

[fol. 156] Plaintiff's Rebuttal

OFFERS IN EVIDENCE

Mr. White: I haven't anything to offer, if the Court please, excepting offering these exhibits that were identified during the evidence.

I offer in evidence the master specification of parts which has been identified as Plaintiff's Exhibit 41, the paper being dated May 27, 1918.

I also offer a similar document dated March 12, 1920, which has been identified as Plaintiff's Exhibit No. 42.

I also offer in evidence drawing No. 9507, which has been identified as Plaintiff's Exhibit No. 39; and drawing

No. 15131, which has been identified as Plaintiff's Exhibit 40; and I also offer original drawing identified by the witness Siegfried, No. 15132, which I ask shall be received in evidence instead of a photostat thereof which has been offered by the defendant.

(Original drawing No. 15132 referred to designated as Plaintiff's Exhibit No. 44.)

Testimony closed.

(Adjourned until December 12, 1931, at 10 o'clock A. M.)

[fol. 157] Third Day

Philadelphia, Pa., December 12, 1931, 10 A. M.

Before Hon. Oliver B. Dickinson, J., and a Jury

Present: Parties as before noted.

AGREEMENT RE DEFENDANTS' EXHIBIT NO. 1

It is agreed between counsel for plaintiff and defendants that the file wrapper, heretofore marked for identification as Defendants' Exhibit No. 1, shall be considered as offered in evidence.

CHARGE OF THE COURT

DICKINSON, J.:

Members of the Jury: This is the sort of a case that puts us upon our mettle, because it is an appeal not merely to our sense of fairness, but really to our good judgments. It is a controversy between business men, over a business proposition. There are in it none of those elements that sometimes, by an appeal to our feelings, jostle judgment from its seat. We can all take a cool-headed view of this question. Your selection as a jury in this case, I might say, is a very substantial compliment to you. I have been on this bench now approaching eighteen years, and this is the first time in my judicial experience in which a case of this kind has been submitted to a jury. I have inquired

of the court officials, and they tell me that it is the first time in the whole history of this court, running back, as it does now, very much more than 150 years. There have [fol. 158] been cases in which the simple question of damages has been submitted to a jury, but never a case, so far as I am informed, before in which the question of patent rights has been submitted to a jury. So, we can conclude from that that you have been specially selected as special experts upon these questions.

I have fallen almost into the habit of making a stereotyped and indeed trite suggestion to juries. It is this: you have a question to decide; before you start in to decide that question, get clearly in your minds what the question is that you are to decide. I think that will commend itself to the judgment of everyone. Let us see if we can get into our minds what the question is, or what the questions are, upon which you are to pass.

You know this case is what is commonly called a patent case, a case arising out of the claims of a patent. You all know the origin of the law of patents. It begins with the provision in our Constitution, and among the specially enumerated powers which are confided to Congress is that which authorizes them, for the purpose of promoting the progress of science and of useful arts, to grant for a limited time to authors and inventors the exclusive right to their respective writings and discoveries. In other words, they are given what is commonly called a monopoly, if they are authors, in the literary work which they have produced; if they are inventors, in the thing which they have invented. They have the exclusive right. No other person can make, use or vend without their consent the thing which they have invented, for which they hold the patent. Following this provision of the Constitution, patents have been authorized by an Act of Congress, and the language of that Act may be of some help to you; so I will try to quote it verbatim: "Any person who has invented or discovered any new and useful art, machine, manufacture or com- [fol. 159] position of matter or any new and useful improvements thereof, not known (that is theretofore known) or used by others, and not patented or described in any publication in this or any foreign country"—and so forth. Therefore you get the idea.

Now let me say this to you. The plaintiff in this case holds such a patent, regularly issued under the provisions

of this law, and we might think at first glance, "Well, that settles it; he has that exclusive right." There are some countries in which that is true, that when a patent is issued to a man, that gives him the exclusive right which I have outlined. But that is not our law. A man may hold a patent, but anyone who is interested and claims the right to make the thing, for illustration, which that patent covers, may challenge the rights conferred by that patent. There are several ways in which it can be done, and this is one, to challenge it by an appeal to a jury, to determine what we call the validity of the patent—they have a patent, but is it a valid patent?

In considering and approaching this question, you therefore take up that question first. The plaintiff in this case has a patent, and holds it, regularly issued. That gives him what is called the prima facie right to a monopoly in the making, using and selling of that thing—what lawyers call a prima facie right; that is, he has that right until and unless it be shown that he has not that right—and that is the purpose of your decision.

In nearly all of these patent cases there are two questions, among others. Usually there are three questions; but particularly two questions: first, what is called the validity of the patent—is this patent valid? That is one question, and you can see, logically, the first question.

The second question is, has that patent right been infringed? In other words, has anyone trespassed upon that [fol. 160] right by doing the thing, the exclusive right to do, which is vested in the holder of the patent? And so you have it here.

Now, when you are determining the validity of the patent, there may be, and very often is, a question which arises with respect to three features of that patent. You will have noticed in the language of this Act of Congress that one thing which is necessary is what is called invention—the man must have invented something. Another thing which you will have noticed is that the thing which he has invented must have what is called utility—it must be of some use. You all catch the significance of those two requirements. Now, understand, the man is given a monopoly, the exclusive right, to make money out of this thing to which he claims the right, and the law grants it to him first as a reward for the inventive talent which he

has displayed; and the people can afford to give him that reward, because the thing that he has invented is useful to the people who are interested in dealing in the matter which the patent concerns. So you see why those two things are required.

Now, there must be another element which enters into the question of the validity of a patent, and that is what patent lawyers call novelty—it must be a new thing, it must have originated with the man who made the claim, it must be something which was not theretofore known, not theretofore used, something a description of which did not appear in any publication or in any patent either in this country or any foreign countries. And you can understand why. No man could justly claim a monopoly in something that was in use beforehand. He would really be taking other people's rights in order to secure a right for himself, and obviously no law would justify him in doing it.

Another thing: if he sees a description in print or otherwise where he is told how to make something else, he can [fol. 161] not claim a monopoly in that by going and asking for a patent for it. Possibly he might get the patent. Why? Because it might happen that the officers of the Patent Office did not know of this previous publication; so, he might get a patent for it. But obviously his patent could have no real validity if all he did was to patent the ideas of somebody else. I am sure you get that clearly in your minds.

With that general thought before you, get right down to this case.

The plaintiff has shown the patent that gives him what I have told you is a prima facie right to the monopoly that he claims. He asserts that the defendant in this case has infringed, as patent lawyers call it, and that is that the defendant has trespassed upon the sole right of the plaintiff to make, use and sell the thing the right to make, use and sell which exclusively belongs to the plaintiff. He produces his letters patent and calls your attention to five claims, as they are called. Every patent must set forth in what are called claims the things upon which the patent is claimed. A patent may have several features, and therefore you have several claims; and the claims, as patent lawyers call them; which are in issue here, those upon which you are asked to pass, are five of the claims of this

patent; the first, second, third, fifth and sixth, if I have them accurately in mind.

Now what is the defense? The defense as to that patent, with respect to two of those claims, one and two, is that it is not a valid patent. Why? Because the very thing which is described in those claims appears in a patent which was issued in England, for illustration—(I think it was in England here)—the very thing, the defendants say, for which the plaintiff is claiming the right to a monopoly in this case is the very thing which has been described in that patent, and therefore your attention is called to it.

[fol. 162] As to the other three claims, the defense, as I have followed it, as to those claims, is this: that they are what is called combination claims—and you want to get clearly in mind what is meant by that. A combination claim means that the thing is made up of a number of features, or what patent lawyers commonly call elements. When you come to a description of it, you describe it by saying that it is this, it is that, and it is the other thing, and describe all the elements of it.

Let me say, in passing, as to that, that it is not necessary in these combination claims that every element in the combination shall be new. In point of truth, every one of them may be old. It is not the things that enter into these elements that are being patented, but it is the combination, and anyone who takes old things and puts them into a new combination, with the result that a new effect, a new result, a new utility, arises out of those elements having been selected and put together in that combination, has the right to a patent upon a combination, although, as I have said, every element which enters into that combination is old. A man may put together a number of old things and he may ask for a patent on them. He can not get it if that is all he has done. That is what patent lawyers call an aggregation, a mere putting together of a number of things without producing any new result as the outcome of their having been put together. That is just the distinction between an aggregation and a combination which I am sure you will appreciate.

The defense comes down, as I analyze it, really to these two propositions: with respect to claims 1 and 2, we say those claims are not valid. Why? Because the patentee did not originate what is described in those two claims;

he was not the original inventor of them, and has no claims to a patent, because they existed before the time he made [fol. 163] application for a patent. Now just a word upon that. This application was filed February 7, 1918. If we have no other light on the subject and we have not here, then you are to take it for granted that that was the date of the origination of the idea which is sought to be incorporated in a patent; and therefore we take it that the inventor (if it was a real invention) invented it on the date of his application, if the question gets into controversy. He is not bound by that date; he may prove that he invented it before he made his application; but if you know nothing else than that date, that is the date that you are to assume was the date of his invention—February 7, 1918.

Now, the defense interposed is that before that date this same thing was in existence. But they do not deny (and I will be corrected if I am wrong in this) that they used the thing which is described in claims 1 and 2. They say yes, we used it, and other people used it and it was known and in use before an application was made for this patent, and of course before the patent was issued. What it comes down to is this, that if the two claims of that patent are valid, we admit, to all intents and purposes, that we have infringed it.

And the defense is equally frank and candid and open with respect to the other three claims of the patent. They say, we have not infringed that patent. The combination we have used is the combination which is a different combination from that which is claimed in that patent. Now let me get that clearly in your minds. Here is a man who makes an application and receives a patent for something which, we will say, has in it nine of these elements, and a man wanting to use something in the same general line sees that he can use something which will answer all his purposes which is made up, not of a combination of those nine elements, but, we will say, of eight of them, or any [fol. 164] less number. He may use eight, seven, or any other number of those same elements that are used in the combination patent; but you will see that his combination is a different combination, and ergo he is not infringing.

Here is a man that invents something—a real invention. He describes it in his letters patent, and makes it very clear, and he has in it a certain number of elements, to use

the same illustration, nine. Another man comes along and finds that he can accomplish the same result by a different combination, of only three, or four, or five, or six of those elements. The man to whose invention the whole nine were necessary would have one combination, and the man to whom the other four or five elements were alone necessary would have an altogether different combination.

I have called your attention to the three elements—invention, utility, novelty. Invention, as I understand it, is not in real controversy here. So, you need not trouble yourselves about it. Utility is not in real controversy here, and you need not trouble yourselves about that. The question of the validity of the claims 1 and 2 in this case turns wholly, as this case has been presented to you, upon the third element, of novelty; was Gray the first one to make—to patent, of course—but to make the thing that is described in the first and second claims? That question has been very fully and ably and clearly argued, and I need do no more than direct your attention to it. You will recall the arguments that have been made.

Upon the other features, as I catch it, the whole question really turns upon that element in the combination which has that adjustable feature, in one or two of the claims, and the screw threaded feature in the other, and the real question is whether the defendant in this case has used that combination which the plaintiff has described in [fol. 165] those claims or whether it has used a different combination; whether, for illustration, he has dropped out of that combination something that was in it.

Now you come to the element upon which a good deal of stress was naturally laid in the arguments addressed to you, and that is what has been referred to as the doctrine of equivalents. Here is a man who has invented and patented something which has (and I will adhere to my old illustration) nine elements in it. I want to use it, and I see that I can substitute for one of those elements something else that produces practically precisely the same results, the same purposes. Now, you see what I have done. I have taken his combination and merely substituted for one or more elements in it something that is really the same thing, but in form or description it is something else.

If I have done that, I am guilty of an infringement of that patent. In other words, I can not escape infringe-

ment by merely changing the phraseology of the description of one of the elements in it, or changing the elements if the substitute that I introduce serves the same purpose, has the same function, and is in real truth the same combination as if I used the one described. I am sure you catch that point.

There is just one other thing I have to say to you, and that is as to the form of your verdict. When you are asked as to whether or not you have agreed upon your verdict, if your finding is in favor of the defendant—(now, understand, I am not intimating, or have no thought of intimating, what your verdict will be; I am only using this as an illustration, so that you will understand what you are to do)—if your verdict, for illustration, is in favor of the defendant, then, when you are asked whether or not you have agreed upon your verdict, your answer is, we find in favor of the defendant, and you need say no more. If, however, your judgment is otherwise, and you find that either claim [fol. 166] 1 or 2 is valid, or you find that there is an infringement of any one of the other three claims, and your verdict should be in favor of the plaintiff, then you have another question to decide, and that can be summed up in the two word question, how much? In other words, the plaintiff is entitled to compensation by an allowance of damages for the legal injury which has attended an infringement of his patent rights, and it is for somebody to determine how much a fair estimate of that damage reaches, and you are the somebody who must answer that question.

It is not necessary for me to remind you that in doing that you are dealing with a problem in dollars and cents. You are all practical men, and you know that if there is ever a time when a man needs the help of the best common sense he has in his possession, it is when he comes to be dealing with a matter of dollars and cents. Go at it with that thought in mind.

In that view of it, (I am not assuming by any means that that will be your view) the plaintiff would have a valid patent which had been infringed, and if course he would be entitled to be compensated for all the damages which he had suffered. Now how are you going to get at it? It is not an easy question, because you may look at it from a great many different points of view. But you have to

make the best estimate that you can. One estimate which it has been suggested that you may adopt is what is called the royalty estimate—what would be fair royalty if these parties were to come together for the purpose of settling by agreement upon a fair royalty for the use of this patented thing? What figure would they finally agree upon?

Of course, you can not establish that by evidence. They did not get together and they did not agree. They could not get together and they could not agree. Neither of them is to blame for it, because they differed upon the [fol. 167] fundamental proposition as to whether anything ought to be paid. But you are to imagine two men, equally disposed to be fair and reasonable, one the inventor of this patented thing, and the other a prospective user of it; the user saying to the patentee, I want the right to make and sell this thing which you have invented. Now, let us agree upon what a fair compensation in the form of a royalty might be.

Therefore you have had evidence along that line, as to what, in that view of it, a fair royalty would be. Of course, if you can get a unit figure upon which a royalty should be paid, then the only other question that you have is how many of these things were there? Therefore you have had what I understand is really an agreement upon that. The parties have agreed as to how many. So, your proposition is to determine what a fair royalty would be, in that view of it; but you are obliged to translate that into a round sum. You can not by your verdict say that this man ought to have a royalty of one cent or ten cents or any other sum. You have got to translate that into a sum of money for which your verdict may be.

So, there might be another view that might be taken of this. You can imagine yourselves as the party to a deal of that kind and if the patentee were to suggest a royalty, you might very well say to him, well, that is one way of getting at it, but if we have a royalty, I have got to keep a strict and accurate account of every one of these machines I sell, and I have got to keep a separate account of those that have this patented thing in them and those which do not have this patented thing in them, and it would be an expensive thing for me to do and a nuisance. More than that, it would be very easy for us to get into a dispute as to whether

I do keep the right account or not, and we might have all kinds of disputes about it. Let us fix this so that we will [fol. 168] have no dispute. What are you going to ask me for a license to use this, so that I can use it in as many of the cameras (for illustration) as I choose? Of course, I will sell as many cameras as I can, and I do not know how many I will sell, but in the course of the life of this patent, I may sell a million or two million or more; but what will you charge me right now, cash down, a round sum, for the right to use this? That would be another way in which you could get at it. I do not recall whether you have had any light in that phase of it or not. But, however, the appeal is made to you.

Take up, then, if that is the only one upon which you have had the help of evidence, the question of a royalty. How would you determine? Well, one thing which I assume would enter into it in your view, or the view of anybody, about it, is what is the commercial value of this thing which has been invented? If it has a large value, you would make your royalty larger, I assume, than you would if it had a small value. For how much can this thing be sold?

Now do not get the idea in your heads, when you are figuring upon that, that all a man has to do if he were making these things is to say, well, I can make them for twenty cents, and if I have a five-cent royalty to pay, I will add five cents, and that can then be sold for twenty-five cents. Things in this world of ours do not operate in that way, neither on the one side nor the other. If the conditions are such as what are called a seller's market, it works one way; if conditions are such that you have what is called a buyer's market, it acts in the other way. Here, for illustration, is something,—you are an importer; there is something that you can buy abroad for fifty cents—with cost of carriage, insurance, time and attention you give to it, and all that sort of thing, you figure fifty cents. You say, I can sell that in this country at a dollar, and you do sell it at a dollar, and that becomes the established price for that [fol. 169] thing,—it sells generally for a dollar; that is the understood price for it all along. Now it is proposed to levy a tariff upon that import, and we will say that is fifty cents. Anybody that figures that as the price before was a dollar and the tax is fifty cents, the thing will then sell for a dollar and a half, the chances are that he is fooled.

The importer who pays the tax says, I have advanced this money, and I am not going to advance it for nothing. I add fifty cents to the real cost of this thing to me. Before I was risking fifty cents on every one of them, and now I am risking a dollar on every one of them. I don't know whether I can sell them or not. Of course, I think I can and I hope I can, but it may be that I cannot, and I will be stuck for it. If it is a seller's market, mind you, when that thing gets upon the market, you will find that the new price, instead of being $1.50, is $2, or something more than that,—and it will always operate in that way. Now you come to the buyer's market, and something of the same thing happens. We will say a royalty,—a man has been making something with no thought of a charge for a royalty, and he has been selling it, we will say, at thirty-five cents. He pays a five-cent royalty, and it seems a very easy thing,—well, just add the royalty to your former price, and these things, instead of selling at thirty-five cents, will sell for only forty. But you are reckoning without your host, if it is a buyer's market. I go in and ask for one and say what is the price? Forty cents. Not on your life! I won't give you forty cents. I will do without it, unless I can buy it from you for thirty-five cents. Just such conditions as you have today.

Under a seller's market, the real price is all the traffic will bear. That is the only limit to it. Under a buyer's market, it is all the buyer will give, and that is all there is to that, and nobody yet found on this earth has been able to control that situation. You have your buyer's [fol. 170] markets and you have your seller's markets. You have your fat years and you have your lean years. They come and go, and the only sad thing about it is that they seem to come with celerity and certainty, and they are very sluggish in their movements to go.

All of those things must be taken into account.

I meant to have said a word to you, and perhaps I ought to say a word to you, upon this question of the validity of the patent. I do not know what is the best way of getting at this thing, but I will give you the result of my experience, and we have had quite a little of it, as we have frequently patent cases to try, and are obliged to try them without the assistance of a jury.

You have noticed in this case, of course, that I was asked to decide that question of validity myself, to have the

Court decide it. That is what was called a question of law, instead of submitting it to a jury. You noticed that I declined to do it. I said no, it is a question for the jury and not for the Court, because it is really a question of fact. Now you may be interested (most people would be) in knowing how does anybody tell whether a question is for the Court or whether it is for the jury? The answer is a very simple one and very easy to grasp. If the question raised is a simple one, so easy to answer that a ten-year-old child could answer it, or really even stronger than that; if it is the kind of a question that is susceptible of only one answer, that nobody but a fool would give other than one answer to it; if it is as plain a question as that, it is for the Court. But if it is a difficult question, and emphatically if it is a man's job, then it is for the jury.

You have got to take this question up and decide it. How are you going at it? I was about to say the result of my experience is that the best approach to a question of this kind is to ask, what was the state of, as patent lawyers call it, the prior art? That is, what was the condition of things [fol. 171] before this claimed inventor entered upon the field? Get that in your minds. Then what improvement was it that this man thinks he introduced into the art? Wherein did he help matters? Get that into your head. When you get those two things into your heads, really there you have come pretty close to understanding what that patent really is.

Now let us adopt that. What was the state of the prior art? What was the condition of things before this plaintiff entered upon it? Well, you will have to take it up by stages. The first state of the art, as I understand it, was this: we all understand that these cameras have in them what is called a shutter. There is a little lid opening there. When that is opened, the film is exposed to the light, and to the image of anything that may be presented to it. When that lid clamps down, it is shut off from the light, and of course it is taking no picture.

The old system was to have a rubber bulb and a rubber tube. You squeezed that rubber bulb, and it was really a pneumatic force that forced the air against this little shutter and opened it. When you took your finger off the bulb

and it came back, that pressure was released, and it was closed.

That had its disadvantages, which are obvious to all of you. You know, to begin with, that rubber is a thing that very easily deteriorates, and when it does it is very liable to crack and get out of service, and you can see other inconveniences in that thing. Now, somebody conceived the idea of substituting for that rubber tube these releases or cables, as they are called. Instead of having a rubber, have a wire. And then somebody discovered that the wire was very liable to bend, and when it bent to stay bent, which would interfere with its operation. So, he said, instead of having a straight wire, have a spiral, have a wire that is made up of windings or convolutions of wire, and then it will readily come back when it is bent.

[1 Ol. 172] The first idea I conceived, when this case was first introduced, without knowing really anything to which the patent pertained, was that what the plaintiff in this case claimed to have invented was this, that it was found that notwithstanding that a convoluted spiral rod had been substituted for the straight rod, either directly or having the spiral wound around it, whichever it was, even then it would what we call kink, and would get troublesome, and that he conceived the idea of having a larger spiral wire with the convolutions of wire further apart, to make it more limber and more flexible, to have that outside of this first wire. In other words, the first wire would become merely a tube for the second one, and this second one would operate to prevent the first one from what was called kinking or manifesting the other infirmities which made it undesirable. But the later developments of the case would make it very clear, as far as I understand (and I will be corrected if I am wrong in that) that the plaintiff did not mean that he was the originator of that idea, because it would very clearly appear that the idea of having these two spirals, we will call them, was in existence before he made his invention, so that his invention came down to the mechanism really which he has described in his claims, (I am speaking now particularly of claims 1 and 2) into the mode and manner of constructing the particular mechanism which he claims to have devised. I think that will give you all the light that I am able to give you to enable you to pass upon these questions, and I will reiterate:

First, you are to pass upon the validity of the claims 1 and 2, and your finding there is determined really by the fact which you will find as to whether or not the thing—now do not trouble yourselves with the idea of words, except as they give us an idea of the thing which they are meant to describe. The patent laws do not give a patent [fol. 173] on mere words, upon verbiage; you will see that it is a thing which a man has invented or made, and get your minds upon what that thing is, and pass upon it accordingly,—was that new to the plaintiff in this case? In other words, would this art have been without it except for the labors of this plaintiff? If it would have been, and the art owes to him that thing, then those claims are valid. If they are valid you may find infringement, because I do not understand that there is any dispute about it.

And the second question, of whether or not the three other claims of the patent have been infringed. And that turns upon the proposition that is submitted to you, that the defendants were not using that combination, and more than that, as I recall, the thing that they were using was in itself a patentable thing; that they had taken a patent for what they were using, and that patent was at least applied for, and I assume was issued, before the plaintiff made his invention in this case.

Now, you see, it would be absurd to say that the defendant was guilty of an infringement of this patent if he was using it before the plaintiff's patented thing was invented, because it has passed into an adage, not of law, but of common sense, an adage of a logical result, that if anything is an infringement of a patented article, then it is an anticipation of the patent, if it was in use before the patentee of the article invented that thing for which he was given a patent.

I think I have covered all the points submitted to me. So far as affirmed in the general charge, they are affirmed. So far as not so affirmed, they are disaffirmed, and exceptions are allowed accordingly. But if there is any particular point which counsel ask to be specifically answered, I will answer it, unless I have already done so; and I suppose the stenographer's notes may show the usual agreement entered into by counsel in the trial of these cases.

[fol. 174] Mr. White: Your Honor, there is only one thing: in your last reference, to the defendant's patent, the

Dakin patent, it did not include an open spiral outer ring; it was a closed outer ring and a closed inner ring.

The Court: That is right. I overlooked that.

Mr. Davis: In the same reference, your Honor said that if the patent was filed or issued before the date of the plaintiff's patent, and your Honor said you assumed it was issued. Now, as matter of fact, it was not issued before, and that might confuse the jury.

The Court: That is the reason I qualified it. I did not know whether it had been or not. But the application date, as I recall it, was in October previous.

Mr. Davis: 1917.

The Court: Yes.

Mr. Davis: So that the jury will understand.

The Court: Yes. I think I made that clear. I said if it was before the patent, all right; but if the patent had been issued before the plaintiff's application, all right; but whether it had been or not, the fact that the application was made proved that the defendant had that thing then, whatever he described in his application. I think I made that perfectly clear to the jury.

Mr. Davis: I hesitate to go any further on this charge, but there was a remark in the early part of it that seemed to me might be misleading. Your Honor said, perhaps in illustration, if the patentee had seen an earlier publication.

The Court: I did not use that expression.

Mr. Davis: If you will instruct the jury that if the publication existed,

The Court: I will.

Mr. Davis: That is, whether he had seen it or not.

[fol. 175] The Court: I will. I did not use the expression, if he had seen it. I know what you have in mind, but that was said in another connection. But I will change that. I will make that clear. Anything else?

Mr. Davis: Only perhaps to repeat what you already said the other day to the jury, that this suit is not brought for profits and profits cannot be recovered.

The Court: I will make that clear.

Now, members of the jury, I had in mind to say to you, and I am quite sure it slipped my mind and I did not say it, with respect to novelty, anticipation, and these other phrases that patent lawyers apply to it, what it means is this, that the idea was abroad, in existence and abroad, to

a greater or less extent, before the patentee of the patent in suit claimed to have invented it; in other words, before he asked for a patent.

The theory of law is that the patentee and everybody else had seen this publication, for instance; but that is a mere theory and does not affect the real question. He may not have seen it. In point of fact, if any of you are interested in this subject by being yourselves inventors, you have no doubt found out what is the very common experience. A man thinks he has invented something, and he thinks it is a pretty good thing, and he rushes to the Patent Office to have it patented, and lo and behold! he discovers any number of patents on the very same subject, and the thing that he thought was new was as old as the hills. That is a very common experience. So, get out of your minds that it is necessary to the finding of invalidity on the ground of want of novelty that the plaintiff must have been trying to perpetrate a fraud by passing off something which he knew was not his. That is not the idea at all. The idea is simply this, was it new? And if it had been already in use by other people, or if it was described in any publication or in any patent, then it is clear that it [fol. 176] was not new, and it does not matter whether the patentee whose patent is in suit thought it was new or whether he did not.

With respect to the other question, some of you may be familiar with the ordinary forms of litigation in cases of this kind, and if you are, you doubtless encountered this, that in the cases of which you knew, a defendant was called upon for what is called an accounting for profits; in other words, he had to account to the patentee whose patent was infringed for all the profits that he had made out of the manufacture of that patented thing, and had to account for them all. Now get this clearly in your minds, that we have nothing to do with the profits in this case, in this kind of a case. We have nothing whatever to do with profits. What you are concerned with is the damage which the patentee suffered, if any—if his patent is valid, of course, and infringed—what damages he suffered, what loss he met with, and not what profits may have been made out of the sale of this in combination with cameras or by themselves, for that matter. Now just keep that in mind. You are not making an accounting for profits.

The original idea was that this case would be concluded last night, so that you would have the whole day before you in which to dispose of it. It is now nearly three o'clock. I want again to consult your convenience by asking you whether you would prefer to take this case tonight or whether you would prefer to come back on Monday morning. Now, understand, there will be nothing further to say to you, but merely the formality of committing the case to you; but if I commit it to you tonight, you will have to stay together until you have agreed upon your verdict; and you may come back Monday morning and you will have the whole day in which to dispose of it.

[fol. 177] Mr. Davis: I will ask your Honor for the allowance of an exception to the denial of the directed verdict, so that that may appear on the record.

The Court: Yes, to make that clear, the record may show that the point asking for a directed verdict is denied without reading, and an exception is allowed to the defendants.

Mr. White: Would your Honor mind telling the jury that that Dakin patent gotten by the defendant did not disclose the plaintiff's invention?

Mr. Davis: How can he do that?

Mr. White: Well, we were just talking about it, and I understood your Honor assented to my statement that the patent was not the defendant's disclosure; but my associate was afraid that you did not make it clear to the jury. In your charge you said that the defendant had applied for a patent on the same thing that we had.

The Court: I would not like to tell them what was in that patent, because I haven't seen it.

Mr. Edelson: If your Honor please, what is meant is this: you said that a test of anticipation was this, that if a thing infringed if later it was anticipation if earlier, and all that we want you to do is instruct the jury that we deny that the Dakin patent is an infringement, that that structure is an infringement.

The Court: If you can agree on that.

Mr. Davis: I have no objection to your telling the jury that the other side deny that this Dakin patent is an infringement, if that means anything.

Mr. Edelson: We do not claim it is, because it has a closed outer coil and a closed inner coil.

The Court: Then, members of the jury, since you prefer to return Monday, you are relieved until Monday morning at ten o'clock. Now you understand there will be nothing [fol. 178] except the formality of submitting the case to you and letting you dispose of it.

Let me say this—not because I have any thoughts that it would be necessary to say it to you, but I want to say it to you for your own protection—of course, you will not discuss this case with anyone, and not permit anyone to discuss it with you. I say that for your protection. If any over-zealous person should approach you and want to discuss it, you can say to him that the Court has directed you not to discuss it, and if he persists in it after that, you report him to me, and I will take care of him after that.

It was agreed and stipulated by and between counsel for the respective parties that if the Court should not be in session when the jury returns with their verdict, the Clerk of the Court may take the verdict with the same force and effect as if it were taken in open court; that if the jury should return for further instructions, the Court may give the jury further instructions in the absence of counsel, with the allowance of an exception to each side to what is said; and that if there are any exhibits or papers which the jury desire to have sent out to them, they may be sent out.

Counsel for plaintiff and defendants requested the learned Judge to direct the stenographer to reduce the notes of testimony and charge of the Court to typewriting and file the same of record in the cause, which request was granted and the stenographer so directed.

Defendants' Points for Charge

"1. That the right of the plaintiff to recover damages, if any, rests upon what he claims as his invention in the numbered paragraphs at the end of his patent. There are six of these numbered paragraphs or claims, introduced [fol. 179] by the words 'I claim as my invention:'. In this suit the plaintiff bases his claim on paragraphs numbered 1, 2, 3, 5 and 6. You are not to consider paragraph numbered 4 on page 3 of the patent. The plaintiff makes no claim under that paragraph.

"2. The first numbered paragraph (claim 1) on page 2 of the patent defines a cable release having the following elements in combination:

(a) 'Two heads'—these are the two enlargements, one at the inner end of the flexible tube for attachment to the camera and the other at the outer end of the tube forming the finger grip for the press button.

(b) 'A barrel on the outer head'—this is the metal sleeve or barrel, marked 'A' on fig. 1-a of the patent, which is screwed into the outer head and lies inside of the fabric tube D and surrounds the short spring marked G.

(c) 'A coiled spring wire tube having spaced coils and being located between said heads and engaging said barrel'—this is the coiled spring casing marked C that runs the whole length of the flexible tube and the outer end of which loosely surrounds and engages the reduced inner end of the sleeve or barrel A.

(d) 'Flexible means joining said heads and definitely holding them a fixed distance from each other while said spring wire tube is partially compressed endwise'—this is the fabric tube marked D.

(e) 'A stem extending slidably through one of said heads and having limited outward movement'—this is the slide or push button marked F associated with the outer head.

(f) 'A slide member in the other of said heads'—is the slide member marked I on fig. 1-b of the patent, associated with the inner head.

[fol. 180] (g) 'And means intervening said stem and said slide member for the transmission of endwise motion from said stem to said slide member'—this is the coiled wire tube J which connects the stem with the slide member and transmits endwise motion from one to the other. It is here claimed as an element of the patented combination without regard to its particular form, whether a coiled wire tube or a straight wire, so long as it connects these two slidable parts and serves to transmit endwise motion from the stem or push button at the outer head to the plunger or slide member at the inner head.

"3. The second numbered paragraph (claim 2) of the patent has the same elements as claim 1, and in addition thereto it has:

(h) 'Yielding means for normally holding said stem at its outer limit'—this is the short coiled spring marked G on fig. 1-a of the patent.

In this claim it is also required that the means intervening between the stem and the slide member for the transmission of endwise motion shall be 'joined' to the stem and to the slide member.

"4. In considering these two claims you are not to disregard the broad language 'means intervening said stem, etc.' and you cannot restrict its meaning to a coiled tube so as to exclude from it a straight wire used instead of a coiled tube. If you find in any of the earlier patents in evidence this same combination of elements in a release mechanism for photographic cameras, you must find that claims 1 and 2 of the plaintiff's patent are void for want of novelty, whether the intervening means between the slide member and the stem in such earlier patent, is a coiled wire tube or a straight wire.

[fol. 181] "5. The defendants assert that this combination of elements is found in the British patent to Edwards & Watson, No. 5741 of 1906, and partially illustrated in Figure 2 of that patent. In this Figure 2 of the Edwards' patent, which illustrates a release mechanism for photographic cameras, there are the following elements:

(a) 'The two heads'—the outer head constituting the finger grip of the press button and illustrated at the left hand end of the figure A, and the inner head illustrated at the right hand end of the figure at B.

(b) 'Barrel on the outer head'—this is the metal sleeve or barrel marked f on the drawing, which lies inside of the fabric tube of casing marked b, and surrounds the short spring marked a'.

(c) 'A coiled spring wire tube having spaced coils and being located between said heads and engaging said barrel'—this is the coiled spring marked g that runs the whole length of the fabric tube and loosely surrounds and engages the inner cup-shaped end of the sleeve or barrel f.

(d) 'Flexible means joining said heads and definitely holding them a fixed distance from each other while said spring wire tube is partially compressed endwise'—this is the fabric tube marked b.

(e) 'A stem extending slidably through one of said heads and having limited outward movement'—this is the slide or push button marked k associated with the outer head.

(f) 'A slide member in the other of said heads'—this is the slide member marked l associated with the inner head.

(g) 'And means intervening said stem and said slide member for the transmission of endwise motion from said [fol. 182] stem to said slide member'—this is the straight twisted wire marked i which connects the stem with the slide member and transmits endwise motion from the stem at the outer head to the slide member at the inner head.

"6. This Edwards & Watson patent structure contains all of the elements of claim 1 in the same combination and for the same purpose, and you must therefore find that claim 1 of the plaintiff's patent is void for lack of novelty because of this earlier patent to Edwards & Watson.

"7. In this figure 2 of the Edwards & Watson patent there is also:

(j) 'Yielding means for normally holding said stem at its outer limit'—this is the short coiled spring marked a'. And in this construction of the Edwards & Watson patent the intervening wire i is 'joined' to the stem and to the slide member.

"8. This Edwards & Watson patent structure contains also all of the elements of claim 2 of plaintiff's patent in the same combination for the same purpose, and you must therefore find that claim 2 of plaintiff's patent is void for want of novelty because of this earlier Edwards & Watson patent.

"9. The other three claims of plaintiff's patent (the paragraphs numbered 3, 5 and 6) have to do with the matter of adjustable connection of the inner tube j to the stem at the outer head and also to the slide member at the inner head:

(a) Claim numbered 3 requires that the 'intervening means' shall 'adjustably surround' said stem and also said slide member.

[fol. 183] (b) Claim numbered 5 requires that this 'intervening means' shall be in the particular form of 'a coiled

wire tube' and that it shall be 'adjustably joined' to the stem and to the slide member.

(c) Claim numbered 6 requires that this 'intervening means' shall be in the particular form of a coiled wire tube and that it shall be 'threaded' to said stem and to the slide member.

"10. Defendants assert that it does not infringe these three claims, or any of them, because it does not have in its releases any adjustable connection. You are to inquire whether in defendants' releases there is an adjustable or threaded connection of the intervening coiled wire tube to the stem at one end and also to the slide member at the other end for the purpose of varying the reach or length of the thrust member. If you find that in defendants' releases these parts are connected in a manner which is not intended to be adjustable, you must find that these three claims numbered 3, 5 and 6, and each of them, is not infringed. It is not enough to constitute an infringement for you to find that these parts can be forcibly separated if you find that it was not intended by the defendants that they should be adjusted.

"11. Defendants further assert that these claims of plaintiff's patent numbered 3, 5 and 6, and each of them, is void because it does not require invention to connect parts of any mechanism to one another by screw threads for the purpose of making the parts adjustable. If you find that it was within the skill of an ordinary mechanic to connect two parts to one another by screw threads, so that they might be adjustable with respect to one another, then you must find that these claims are void for lack of invention.

[fol. 184] "12. Defendants submitted in evidence United States Patent to Duryea No. 1,072,439, which shows at 10 and 11 on Fig. 2 such a screw threaded, adjustable connection for connecting the two ends of the thrust member to the handle lever 6 at one end and to the associated member 8 at the other end, as shown in fig. 1. You must assume that the disclosure of this Duryea patent was known to the plaintiff, and you must inquire whether, with the knowledge of that patent, it would require invention, i. e., more than ordinary mechanical skill, for the plaintiff to connect the parts of his device by a like screw threaded adjustable connection.

"13. Defendants assert that each of claims numbered 3, 5 and 6 of plaintiff's patent is void for lack of novelty, or must be so construed as to exclude defendants' construction, because of the British patent to Edwards & Watson No. 15,645 of 1905, in evidence. That patent says at page 1, lines 17 to 24, inclusive, and again at page 4, lines 10 to 17 inclusive:

'The innermost member may be formed of one or more wire or wires or of stranded wires or of wires held together by wire coiled around them or a closely coiled spiral and is attached at one end to a push button or push piece—for example passed at one end into the sleeve or shank thereof and there secured by compressing or denting said sleeve at one or more points—this push button or push piece being adopted to slide within or otherwise operate in conjunction with the first named sleeve to which uttermost member is attached as aforesaid.'

Defendants assert that this is the way in which the stem and the slide member respectfully are secured to the intervening coiled wire tube of defendants' releases. If you find that in defendants' releases the stem and the slide [fol. 185] member respectively are secured to the coiled wire tube in this way, then you must find that these claims numbered 3, 5 and 6 respectively of plaintiff's patent are void or that they cannot be interpreted to include defendants' structures as an infringement.

"14. It has been represented to you by the plaintiff that he has a patent for a release for photographic cameras in which the inner thrust member is in the form of an incompressible spiral coil surrounded by an outer spiral coil, the convolutions of which are in open or spaced relation, and in which the outer coil is held in partially compressed condition by means of a substantially inextensible outer jacket of fabric material. The claims of the plaintiff's patent do not cover or give him a patent for that combination of elements. In claims 1 and 2 the inner thrust member is defined broadly as 'means intervening said stem and said slide member for the transmission of endwise motion from said stem to said slide member'. This language cannot be restricted to an intervening means which has the particular form of an incompressible spiral coil. In claims

3, 5 and 6 the adjustable connection is introduced and you are not at liberty to disregard it.

"15. Defendants contend and plaintiff has admitted that when plaintiff first applied for his patent to the Patent Office, he presented a claim numbered 17 for that combination of elements in which the inner thrust member is in the form of an incompressible spiral coil surrounded by an outer spiral coil, the convolutions of which are in open or spaced relation, and in which the outer coil is held in partially compressed condition by means of a substantially inextensible outer jacket of fabric material. Defendants contend that that claim was rejected by the Patent Office on the ground that it was not patentable and that the plaintiff cancelled and gave up the claim. It appears from paper No. 1, [fol. 186] page 13 of the 'File Wrapper Contents' of plaintiff's patent in evidence, that such a claim was presented. It appears from paper No. 2, pages 19 and 20 of that document that the claim was rejected by the Patent Office on the ground that it was not patentable. It appears from paper No. 5, page 27 of that document that the claim was cancelled. You must therefore find that the plaintiff gave up the claim, and that his patent does not cover or give him the right to the exclusive use of that combination.

"16. Defendants contend that claim 17 appearing on page 13 of the 'File Wrapper Contents' in evidence, and claim 20 appearing on page 14 of that document respectively, were identical with claim 1 of plaintiff's patent, and with claim 2 of plaintiff's patent, respectively, with the single exception that they define the 'intervening means' as a 'coiled wire tube.' Upon direct comparison that appears to be the fact. Both of these claims were rejected by the Patent Office on the grounds that they were not patentable and both were cancelled by the plaintiff. Because of this you are not at liberty to construe claim 1 of plaintiff's patent, or claim 2 of plaintiff's patent, as though the 'intervening means' were defined as 'a coiled wire tube.'

"17. Defendants contend, and it appears from direct comparison to be true, that claim 5 of plaintiff's patent is identical with claim 17 as originally presented to the Patent Office, with the single exception that in claim 5 the words 'adjustably joined' are added. Claim 17 was rejected by the Patent Office on the ground that it was unpatentable and

it was cancelled by the plaintiff. Because of this you are not at liberty to ignore the limitation of claim 5 to a structure in which the coiled wire tube is adjustably joined to said stem and to said slide member, or to find infringement of claim 5 of plaintiff's patent by a structure in which [fol. 187] the coiled wire tube is not 'adjustably joined' to said stem and to said slide member.

"18. Defendants contend, and direct comparison shows it to be true, that claim 6 of plaintiff's patent is identical with claim 18, as originally presented to the Patent Office, with the single exception that where claim 18 defined the coiled wire tube as 'joined tube' to said stem, claim 6 of the patent defines the coiled wire tube as 'threaded tube' to said stem and to said slide member. Because of this you are not at liberty to ingore the limitation of claim 6 to an arraingement in which a coiled wire tube is threaded to the stem and to the slide member, or to find infringement of this claim by defendants' structures, if you find in them that the coiled wire tube is not threaded to the stem and also to the slide member.

"19. Defendants contend that the use of an incompressible spiral coil as a thrust member of a photographic camera release was disclosed in the German Patent to Werrmann, No. 147,572, marked d in Fig. 2 of that patent, and that from the date of the German Patent, which is May 28, 1902, the use of such an incompressible spiral coil in camera releases in place of a straight wire was a known expedient available to be used by any one who desired to use it in the United States, and that because of this it did not require invention; or involve infringement of plaintiff's patent, for the defendants to substitute such an incompressible spiral coil for a straight wire thrust member, such as plaintiff admits to have been in use prior to plaintiff's invention. If you find in this German patent such an incompressible spiral coil used as a thrust member in a camera release, you must find for the defendants.

"26. It appears from German Patent No. 147,572 of 1902 to Werrmann, in evidence in this case, that a coiled [fol. 188] wire tube thrust member was a known mechanical equivalent of a straight wire thrust member in a release for photographic cameras before plaintiff's supposed invention, and you must so find.

"21. It appears from Edwards British Patent No. 15,645 of 1905, in evidence in this case, and particularly from the statement at lines 17 and following of page 1, and again at lines 10 and following of page 4 thereof, to wit:

'The innermost member may be formed of one or more wire or wires or of stranded wires or of wires held together by wire coiled around them or a closely coiled spiral'

that a closely coiled wire thrust member was, before plaintiff's supposed invention, a known equivalent of a straight wire thrust member in a photographic cable release in which the outer thrust member is surrounded by an outer spiral coil, the convolutions of which are in open or spaced relation (*b* of Figs. 1, 2 and 3 of the British Patent) and in which the outer coil is held in partially compressed condition by means of a substantially inextensive outer jacket of fabric material (*c* of the British Patent); and you must so find.

"22. Defendants assert that before plaintiff's supposed invention a coiled wire tube thrust member was a known mechanical equivalent for a straight wire thrust member in a release for photographic cameras, and that before his supposed invention plaintiff had knowledge of releases which differ from his release only in the use of a straight wire thrust member instead of a coiled wire thrust member. If you find these things to be true, you must bring in a verdict for defendants.

"23. It appears from the evidence (particularly from the United States Patent to Edwards No. 828,815, and also [fol. 189] the British Patents to Edwards No. 13,157 of 1905, No. 15,645 of 1905, and No. 5741 of 1906) that prior to plaintiff's supposed invention an outer spiral coil, the convolutions of which are in open or spaced relation, was a known equivalent in camera releases of an outer spiral coil having its convolutions wound in contact with one another, and you must so find.

"24. Defendants assert that, before plaintiff's supposed invention, an outer spiral coil, the convolutions of which are in open or spaced relation, was a known mechanical equivalent of an outer spiral coil, the convolutions of which are wound in contact with each other, and that the evi-

dence shows that before plaintiff's supposed invention, the defendant, Eastman Kodak Company (of New York), was manufacturing cable releases identical with the cable releases relied upon in this case as infringements except that the outer spiral coil was wound with its convolutions in contact with one another instead of in spaced relation. If you find these two things to be true, you must bring in a verdict for defendant.

"25. The combination, in a cable release, of two heads, a barrel on the outer head, a coiled spring wire tube having spaced coils and being located between said heads and engaging said barrel; flexible means joining said heads and definitely holding them at a fixed distance from each other while said spring wire tube is partially compresesd endwise, a stem extending slidably through one of said heads and having a limited outward movement, a slide member in the other of said heads, and means intervening said stem and said slide member from said stem to said slide member was described in Edwards' British Patent No. 5,741, of 1906, in such full, clear and exact terms, as to enable any persons skilled in the art of making cable [fol. 190] releases to make and use an invention so described without the exercise of more than mechanical skill.

"26. Claim 1 of plaintiff's patent is void.

"27. The combination, in a cable release of two heads, a barrel on the outer head, a coiled spring wire tube having spaced coils and being located between said heads and engaging said barrel, flexible means joining said heads and definitely holding them at a fixed distance from each other while said spring wire tube is partially compressed endwise, a stem extending slidably through one of said heads and having limited outward movement yielding means for normally holding said stem at its outer limit, a slide member in the other of said heads, and means intervening and joined to said stem and said slide member for the transmission of endwise motion from said stem to said slide member was described in Edwards British Patent No. 5,741 of 1906, in such full, clear and exact terms, as to enable any persons skilled in the art of making cable releases to make and use an invention so described without the exercise of more than mechanical skill.

"28. Claim 2 of plaintiff's patent is void.

"29. Claim 3 of plaintiff's patent is void.

"30. Claim 5 of plaintiff's patent is void.

"31. Claim 6 of plaintiff's patent is void.

"32. There is no evidence that the defendants, or any of them, made, used or sold, during the period beginning June 9, 1924, and ending June 9, 1930, any cable release having as an element of its structure means intervening and adjustably surrounding the stem and slide member for the transmission of endwise motion from said stem to said slide member of said release.

[fol. 191] "33. There is no evidence that the defendants, or any of them, made, used, or sold, during the period beginning June 9, 1924 and ending June 9, 1930, any cable release embodying the combination of two heads, a coiled spring wire tubing having spaced coils and being located between said heads, flexible means joining said heads and definitely holding them at a fixed distance from each other while said spring wire tube is partially compressed endwise, a stem extending slidably through one of said heads and having limited outward movement, yielding means for normally holding said stem at its outer limit, a slide member in the other of said heads, and means intervening and adjustably surrounding said stem and said slide member for the transmission of endwise motion from said stem to said slide member.

"34. Claim 3 of plaintiff's patent is not infringed.

"35. There is no evidence that the defendants, or any of them, made, used, or sold, during the period beginning June 9, 1924 and ending June 9, 1930, any cable release having as an element of its structure a coiled wire tube intervening and adjustably joined to the stem and slide member for the transmission of endwise motion from said stem to said slide member of said release.

"36. There is no evidence that the defendants, or any of them, made, used or sold, during the period beginning June 9, 1924 and ending June 9, 1930, any cable release embodying the combination of two heads, a coiled spring

wire tube having spaced coils being located between said heads, flexible means joining said heads and definitely holding them at a fixed distance from each other while said spring wire tube is partially compressed endwise, a stem extending slidably through one of said heads and [fol. 192] having limited outward movement, a slide member in the other of said heads, and a coiled wire tube intervening and adjustably joined to said stem and said slide member for the transmission of endwise motion from said stem to said slide member.

"37. Claim 5 of plaintiff's patent is not infringed.

"38. There is no evidence that the defendants, or any of them, made, used, or sold, during the period beginning June 9, 1924 and ending June 9, 1930, any cable release having as an element of its structure a coiled wire tube intervening and threaded to the stem and slide member for the transmission of endwise motion from said stem to said slide member of said release.

"39. There is no evidence that the defendants, or any of them, made, used, or sold, during the period beginning June 9, 1924 and ending June 9, 1930, any cable release embodying the combination of two heads, a coiled spring wire tube having spaced coils and being located between said heads, flexible means joining said heads and definitely holding them at a fixed distance from each other while said spring wire tube is partially compressed endwise, a stem extending slidably through one of said heads and having limited outward movement, a slide member in the other of said heads, and a coiled wire tube intervening and threaded to said stem and said slide member for the transmission of endwise motion from said stem to said slide member.

"40. Claim 6 of plaintiff's patent is not infringed.

"41. Under all the evidence in this case your verdict must be for defendants."

[fol. 193] Defendants' Additional Points for Charge:

"1. The date of plaintiff's alleged invention is the filing date of his patent application, February 7, 1918.

"2. Any patent or publication issued or published earlier than February 7, 1918 in this country or abroad is to

be considered by you as knowledge prior to plaintiff's invention.

"3. Defendants' patent No. 1,297,327, application filed October 15, 1917, is earlier than plaintiff's invention. If you find in that patent 1,297,327 the same connection between the coiled wire tube and the trip or slide member that you find in defendants' accused structures, then you must find that claims 3, 5 and 6 of plaintiff's patent are not infringed.

"4. Plaintiff offered evidence to show that he disclosed a certain construction of release to Eastman Kodak Company on or about July 1st, 1918. Defendants have offered evidence to show that Kodak Company knew about and had drawings of this construction before that date. You are to consider that evidence only on the question, if there is any question in your minds, as to the identity or lack of identity between defendants' structures and plaintiff's patented structures. You are not to consider that evidence in connection with any question of damages. It is for the Court to say whether the actual damages, if any, suffered by plaintiff should or should not be considered.

"5. If you come to consider the amount of damages you must bear in mind that plaintiff in this case has not sued for and can not recover plaintiff's profits. You are to consider all the evidence as to the nature of the invention, its utility and advantages and extent of the use involved, and [fol. 194] you should endeavor to find what the parties would have agreed upon if both were reasonably trying to reach an agreement."

DEFENDANTS' MOTION FOR A DIRECTED VERDICT

"The defendants move the Court on the whole evidence in the case, to direct the jury to find a verdict for the defendants. The grounds of the motion are as follows:

"1. That the claims 1 and 2 of plaintiff's patent are void because of anticipation and total lack of novelty in view of the British Patent to Edwards & Watson No. 5,741 of 1906.

"2. That claims 3, 5 and 6 of plaintiff's patent are not infringed by defendants' accused structures because in

defendants' structures the stem and the slide member are connected to the coiled wire tube in the same way as in defendants' Patent No. 1,297,327 (application filed October 15, 1917), which is earlier than plaintiff's alleged invention (application filed February 7, 1918). What infringes if later is an anticipation if earlier.

"3. That the proceedings in the Patent Office leading up to the grant of plaintiff's patent preclude reading the words 'a coiled wire tube' into claims 1 and 2 as a limitation of the words 'means intervening' in those claims; and preclude the omission by construction of the words 'adjustably surrounding' in claim 3, 'adjustably joined' in claim 5, and or 'threaded' in claim 6.

"4. That claims 3, 5 and 6 of plaintiff's Patent are void for lack of novelty because the same connection of stem and slide member to a coiled wire tube thrust member surrounded by an open coiled spring with a fabric jacket is disclosed in British Patent to Edwards & Watson No. 15,645 of 1905."

[fol. 195] Monday, December 14, 1931, 10 A. M.

The Court: Members of the jury, you may retire to your room and deliberate upon your verdict.

VERDICT

Verdict: For plaintiff, $153,553.18.

IN UNITED STATES DISTRICT COURT

MOTION FOR NEW TRIAL AND TO SET ASIDE VERDICT—Filed December 18, 1931

And now comes the defendants in the above-entitled case and move the Court for a new trial and for an order setting aside the verdict in the above-entitled case for the following reasons:

1. The verdict was against the weight of the evidence.

With leave to file additional reasons in support thereof on or before January 2, 1932.

Boyd Lee Spahr, Attorney for Defendants.

December 18, 1931.

Approved:
By the Court.

Attest: Leo A. Lilly, Deputy Clerk.

[fol. 196] In United States District Court

Opinion—Rule for a New Trial—Filed December 20, 1932

Dickinson, J.:

This was the rarity of a Patent case tried to a jury. Doubtless from force of habit the charge of the Court was limited to a submission of the fact issues without discussion by the trial Judge. This is we think ordinarily the right course but a Patent case is an exception. Overlooking this the charge was wholly inadequate, and the jury lacked the instructions which should have been given. A new trial must in consequence be granted.

Rule absolute.

[fol. 197] In United States District Court

Stipulation Waiving Trial by Jury—Filed February 11, 1932

And, now, to wit, February 9, 1932, it is stipulated and agreed by and between counsel for plaintiff and defendant in the above-entitled cause, that trial by jury is hereby waived and that the case shall be submitted to the Court for decision upon the record already made, as if the testimony and exhibits offered in evidence at the trial before Judge Dickinson and a jury had been duly offered in evidence before the Judge who may be assigned to hear this case, subject to any objections which appear on the record, and that all motions made by either party at the said trial

shall be deemed to have been made before the Judge trying the case, both parties to have the right of appeal as in other cases.

Leon Edelson, T. R. White, Attorneys for Plaintiff.
Boyd Lee Spahr, Attorney for Defendants.

[fol. 198] In United States District Court

Opinion—Sur Pleadings and Proofs—Filed July 13, 1932

Kirkpatrick, J.:

This is an action at law for patent infringement. It was first tried to a jury and resulted in a verdict for the plaintiff in the amount of $153,553.18. Being of the opinion that his instructions to the jury were inadequate, the trial judge ordered a new trial. Thereafter the parties stipulated in writing that the case be tried to the court without a jury upon the testimony taken at the jury trial and upon that record the case is now before the court for findings and judgment.

The patent in suit is United States patent No. 1,314,867 (filing date, February 1, 1918) to the plaintiff for a flexible power-transmitting mechanism, particularly intended for use as a cable release, a well known device by which the shutter of a camera is actuated by pushing a plunger in the end of a cord or cable held in the operator's fingers. The reason for a flexible mechanism is that a thrust upon the shutter control either directly or through a rigid member is likely to jar the camera in the moment of exposure.

Formerly the desired result was accomplished by air compression by means of a bulb and a rubber tube. But it was found that rubber deteriorated rapidly, and the cable release, having a stem slid or pushed through an outer tubular member, was then evolved.

It was important, of course, that the device should be as nearly perfectly flexible as possible. A very slight degree of rigidity sometimes resulted in kinks or bends which prevented the free play of the inner sliding member and either disturbed the position of the camera or interfered with the perfect response of the shutter to the operator's control.

[fol. 199] Now a solid coiled wire tube is capable of transmitting power from a lengthwise thrust and at the same time is in the highest degree flexible, and the idea of making the members of the cable of coiled wire tubes is disclosed in the earliest patents for cable releases. In fact, the earliest of all the patents cited, the German patent to Wermann, of 1902, shows both the inner thrust member and the sheath constructed in this fashion.

It is the plaintiff's claim, however, that he first invented the combination of a closed coil for the thrust member with an open coil for the sheath. By a closed coil is meant one in which the spirals are in contact throughout so that the whole is incompressible lengthwise. In an open coil the adjacent spirals are spaced. Both in his testimony at the trial and through his counsel in argument the plaintiff urged that this combination of closed inner and open outer coils is the essence of his patent and his real contribution to the art.

With the exception of one minor feature, which appears in claims 5 and 6 and which will be discussed later, it is practically conceded that all the instrumentalities of the plaintiff's device were known and used in the prior art. Taking the question in its broadest aspect and assuming, as the plaintiff contends, that all the claims (including 1 and 2) can be so construed as to include the combination which he says constitutes his real invention, I am satisfied that it amounts to nothing more than an assembly of two selected elements, neither of them new, without any new joint function, and hence is unpatentable. Of course, they cooperate and whoever first combined a flexible inner thrust member with a flexible outer sheath in a cable release may have produced a real invention, but when that had been done, and especially after coiled wire tubes had been evolved for both members, the selection of superior forms [fol. 200] of coils from the prior art produced no new result as the product of the combination. Whatever advance there may have been was simply an aggregate of several results, each the complete result of one of the combined elements. The principle is too well established to require citation of authority.

No doubt a closed coil is the most satisfactory type of inner thrust member to be found in the prior art. An open coil would not do because of its compressibility and the only alternative was an ordinary wire or stranded wires.

But the closed coil being incompressible could transmit power just as well, while its superior flexibility greatly reduced the danger of kinking. The closed coil thrust member is a feature of the Wermann German patent of 1902, and also of the patent to Dakin and Underwood (filing date October 15, 1917) and was also manufactured by the defendant in this case prior to the date of the plaintiff's application.

For the sheath member an open coil is undoubtedly better than a closed coil. When the cable is bent the convolutions of the spirals on the inner side of the bend are drawn together without separating the spirals on the outside of the bend. This is desirable since the whole thing is enclosed in inextensible fabric and, otherwise inconvenient stresses and dislocations might be produced. But this mode of operation is a function of the outer spiral coil of itself and is performed entirely without regard to adjacent members of the combination. An open coil sheath member is shown in the Edwards British patent, No. 13,157, of 1905. The specification of that patent expressly recognizes that it was an old feature of such devices and had been used before in combination with an incompressible inner member.

It may be conceded that the plaintiff selected the best types of the elements to be found in the prior art and put [fol. 201] them together. However, his closed coil thrust member still transmitted power in exactly the same way in which it did in the Wermann German patent and the Dakin and Underwood patent, and the fact that it was enclosed in an open coil instead of a closed coil did not change its mode of operation. The open coil sheath member flexed in precisely the same manner as in the various British patents which disclose its use, and it would do so whether the thrust member were a coiled tube, a stranded wire, or a plain wire. I am unable to see how the advantages of the particular types selected by the plaintiff for each of these members are enhanced or in any way affected by the character of the other member, or to find anything new in the functional relationship between them.

I should say here, parenthetically, that I do not agree with the defendant that claims 1 and 2, if construed to call for a closed coil inner member, would be anticipated by the British patent to Edwards, No. 5,471 of 1906. I think that the disclosure of that patent as to the innermost mem-

ber means what the plaintiff says it does, namely that it may be formed of wires held together by a closely coiled spiral and that it does not call for a closely coiled spiral alone. This conclusion arises not only from the grammatical construction of the sentence, but from a consideration of the patent itself. The exemplifications shown in figures 5, 6 and 7 all provide for power transmission by a pull rather than a push. The cross-bar marked "j" in these figures is slideable on a barrel so that, with the operator's fingers about the cross-bar, the pressure of his thumb upon the button will pull the inner member outwardly instead of pushing it inwardly. A coiled spring could not possibly be used in this form of the device because it is extensible, but there is no suggestion in the specification that these forms require any different kind of inner mem- [fol. 202] ber from the other forms in which the power is transmitted by a push.

The conclusion that the combination of closed coil inner member and open coil outer member is not patentable in view of the prior art renders claims 1 and 2 invalid even if they be interpreted as claiming that particular combination, as the plaintiff contends. It may be well, however, to say that in my opinion they may not be so interpreted. These claims do not call for a coiled tube as an inner member but merely for "means intervening * * * for the transmission of endwise motion," and, if read as stated, made a combination which was clearly anticipated by the British patents. Only by reference to the specification can the claim be narrowed to a claim for a coiled tube inner member. The file wrapper history, however, shows that another claim (original claim 17) identical in all respects with claim 1 (and substantially identical with claim 2) except for the fact that it called for a "coiled wire tube" instead of "means intervening" was disallowed by the examiner, as so anticipated. The plaintiff then amended by including a "barrel" feature in both claims and claim 1 was allowed. Claim 17 was again rejected "as not patentably distinct from claims 1 and 4 allowed." In this action the plaintiff acquiesced.

The case is so nearly on all fours with U. S. Repair etc., Company v. Assyrian Asphalt, 183 U. S. 591, that the opinion in that case may be applied to this with a very little paraphrasing, thus: "Another objection to the proposed

limitation of the claim by making it read * * * ('a coiled wire tube') * * * in lieu of the unqualified word * * * ('means') * * * is the fact that the * * * ('17th') * * * claim, which contained the additional words, was withdrawn by the patentee upon a ruling or declaration of the Patent Office that the 1st and * * * [fol. 203] ('17th') * * * claims were the same in substance and could not both be permitted to remain in the case. * * * Having voluntarily abandoned the claim for * * * ('a coiled wire tube') * * * the patentee * * * may not now insist that a broad claim containing no suggestion of such invention shall nevertheless be subjected by construction to the same restriction."

The examiners' additional statement in rejecting claim 17, "the use of the 'coiled wire tube' for the 'intervening means' defined in claim 1 is not patentable in view of the German patent of record," is not so hard to understand as the plaintiff appears to think. In allowing claim 1 the examiner obviously felt that a barrel feature was the only thing which saved it. He had already said that "means intervening" was not patentable and then he went on to say that further defining "means" as a "coiled wire tube" did not help the situation because the coiled wire tube was no advance over the German patent. Therefore, he said, the combination as patentable, which meant including the barrel, was identical in the two claims. Of course, he was in error in thinking that the barrel was a new feature, because it is clearly disclosed in British No. 5,741 of 1906 to Edwards and Watson, but that patent probably had not been called to his attention.

Claim 3 is clearly not infringed and the plaintiff does not seriously contend that it is. In the defendant's device the inner thrust member does not surround either the stem or the slide member.

Claims 5 and 6 call for a closely coiled inner tube and could be dismissed as invalid for want of patentable novelty for the same reasons which apply to claims 1 and 2, except for the fact that they contain the additional requirement that one of the features of the combination—a small rigid stem which takes power from the thrust member and actually pushes the shutter—be "adjustably joined" to the [fol. 204] thrust member (claim 5) or "threaded to" it (claim 6). This form of connection was described by the plaintiff himself as "a minor feature of the machine * * *

only a side issue" and, though claims 5 and 6 are expressed as combination claims they are obviously in reality nothing more than claims for this particular form of connection. The patent to Dakin and Underwood shows a method of joining the thrust member to the stem which is substantially the same as that of the alleged infringing device. The argument made by the plaintiff that the two prick points disclosed in the Dakin drawing deform the coils of the thrust member and prevent it from being screwed out is without support in the record, and the fact that Dakin uses the word "fixed" in describing his method of attachment does not necessarily mean that the stem is so fixed that it cannot be unscrewed. The connection of the infringing device is a single prick point and it is rather hard to see from an X-ray photograph to what extent it deforms the coils of the thrust member if at all, but, taking the substance of the matter, that type of connection is clearly disclosed by Dakin. If the claims are to be construed as covering it they would be invalid as anticipated and as a matter of fact I think they are.

I have not dealt with the question of the anticipation of the plaintiff's device by the defendants themselves because, in view of the conclusions reached in this opinion, it is unnecessary for me to make any definite findings upon this point and I refrain from so doing.

The statements of fact contained in this opinion may be taken as findings of fact. If separate findings of fact are desired the parties may submit requests in accordance herewith.

[fol. 205] The conclusions are:

1. The combination of closed coil inner thrust member and open coil outer sheath member is not patentable because its elements were known to the prior art and no new mode of operation or functional relationship arises from putting them together.

2. Claims 1 and 2 cannot be interpreted as calling for a closed coil inner thrust member in view of the file wrapper history of this patent.

3. Claims 1 and 2 are anticipated.

4. Claim 3 is not infringed.

5. Claims 5 and 6 are invalid because United States patent No. 1,297,327 to Dakin and Underwood antedating the

plaintiff's application discloses the method of attaching the thrust member to the stem claimed, and conclusion, "1" applies to these claims.

Judgment may be entered for the defendant.

By the Court.

W. H. Kirkpatrick, J.

IN UNITED STATES DISTRICT COURT

ORDER SEALING BILL OF EXCEPTIONS

The said counsel for the said plaintiff did then and there tender this bill of exceptions to the rulings, opinion and action of the said Court, and requested the seal of the Judge aforesaid should be put to the same, according to the form of the statute in such case made and provided.

And, thereupon, the aforesaid Judge at the request of said counsel for the plaintiff, did put his seal to this bill [fol. 206] of exceptions, pursuant to the aforesaid statute in such case made and provided this twenty-eighth day of July, 1932.

W. H. Kirpatrick, Judge. (Seal)

Pennie, Davis, Marvin & Edmonds, Ballard, Spahr, Andrews & Ingersoll.

Approved as to form.

Boyd Lee Spahr, Attorney for Defendants.

IN UNITED STATES DISTRICT COURT

PRÆCIPE FOR JUDGMENT—Filed July 16, 1932

To the Clerk of the said Court:

Enter judgment in the above-entitled case, in accordance with the opinion of Kirkpatrick, J., filed therein, in favor of the defendants and against the plaintiff.

(Sgd.) Ballard, Spahr, Andrews & Ingersoll, Attorneys for Defendants.

[fol. 207] IN UNITED STATES DISTRICT COURT

JUDGMENT—Filed July 16, 1932.

Before Kirkpatrick, J.

And now, July 16, 1932, in accordance with the opinion of the Court and by præcipe filed, judgment is hereby entered in favor of defendants and against the plaintiff, Charles B. Gray.

By the Court.

Attest (Sgd.) E. G. Johnson, Deputy Clerk.

IN UNITED STATES DISTRICT COURT

PETITION FOR APPEAL—Filed August 15, 1932

To the Honorable William H. Kirkpatrick, Judge of the District Court of the United States for the Eastern District of Pennsylvania:

Charles B. Gray, your petitioner, is the plaintiff in the above-entitled case, and prays that he may be permitted to take an appeal from the judgment entered in the above case on the thirteenth day of July, 1932, to the United States Circuit Court of Appeals for the Third Circuit, for the reasons specified in the assignments of error which are filed herewith.

And your petitioner desires that said appeal shall operate as a supersedeas, and therefore prays that an order be made fixing the amount of security which the plaintiff shall give and furnish upon such appeal, and that upon [fol. 208] giving such security all further proceedings in this court be suspended and stayed until the termination of said appeal by the said Circuit Court of Appeals.

Leon Edelson, T. R. White, Attorneys for Charles B. Gray.

August 13, 1932.

IN UNITED STATES DISTRICT COURT

ORDER ALLOWING APPEAL—Filed August 15, 1932

The petition of Charles B. Gray, plaintiff in the above-entitled case, for an appeal from the final judgment is hereby granted and the appeal is allowed, and upon the petitioner filing a bond in the sum of $250 with sufficient sureties and conditioned as required by law, the same shall operate to suspend and stay all further proceedings in this court until the termination of said appeal by the Circuit Court of Appeals.

(Sgd.) W. H. Kirkpatrick, District Judge.

August 13, 1932.

[fol. 209] IN UNITED STATES DISTRICT COURT

PLAINTIFF'S ASSIGNMENTS OF ERROR—Filed August 15, 1932

And now comes the plaintiff in the above-entitled action and files the following assignments of error on which he relies upon the prosecution of his appeal in the above-entitled action from the judgment made by this Honorable Court on the thirteenth day of July, 1932, and assigns error in the following matters, to wit:

First: The learned Trial Judge erred in finding as follows:

"1. The combination of closed coil under thrust member and open coil outer sheath member is not patentable because its elements were known to the prior art and no new mode of operation or functional relationship arises from putting them together."

Second: The learned Trial Judge erred in finding as follows:

"2. Claims 1 and 2 cannot be interpreted as calling for a closed coil inner thrust member in view of the file wrapper history of this patent."

Third: The learned Trial Judge erred in finding as follows:

"3. Claims 1 and 2 are anticipated."

Fourth: The learned Trial Judge erred in finding as follows:

"5. Claims 5 and 6 are invalid because United States patent No. 1,297,327, to Dakin and Underwood antedating the plaintiff's application discloses the method of attaching the thrust member to the stem claimed, and conclusion "1" applies to these claims."

[fol. 210] Fifth: The learned Trial Judge erred in his final order as follows:

"Judgment may be entered for the defendant."

Wherefore, plaintiff prays that the said judgment and order may be reversed, and for such other and proper relief as to the Court may seem just and proper.

Leon Edelson, T. R. White, Attorneys for Charles B. Gray.

[fol. 211] In United States District Court

Præcipe for Transcript of Record—Filed August 17, 1932

To the Clerk of said Court:

You are hereby requested to make a transcript of the record to be filed in the United States Circuit Court of Appeals for the Third Circuit, pursuant to an appeal allowed in the above-entitled case, and to include in such transcript of record the following papers and exhibits, to wit:

1. Docket entries.
2. Statement of claim, both original and as amended.
3. Pleas of respective defendants.
4. Bill of exceptions and order of Court sealing the same (including testimony, exhibits, charge of Court to jury at the first trial, verdict at the first trial, defendants' motion and reasons for a new trial, defendants' additional reasons for a new trial, opinion of Court granting defendants' motion for a new trial, stipulation between counsel for plaintiff and defendants respecting the new trial, and opinion of Court at conclusion of second trial).
5. Præcipe for and entry of judgment.

6. Judgment.
7. Assignments of error.
8. Petition for appeal and allowance thereof.
[fol. 212] 9. Clerk's certificate.
10. This præcipe and service thereon.

Said transcript to be prepared as required by law and the rules of this Court and the rules of the United States Circuit Court of Appeals for the Third Circuit, and to be filed in the office of the clerk of the said Court on or before the twelfth day of September, 1932.

Leon Edelson, T. R. White, Attorneys for Appellant, Charles B. Gray.

Service of the above præcipe is accepted and acknowledged this sixteenth day of August, 1932.

(Sgd.) Ballard, Spahr, Andrews & Ingersoll, by Allen Hunter White, Attorneys for Appellees.

[fol. 213] Clerk's Certificate to foregoing transcript omitted in printing.

[fol. 214] In United States District Court for the Eastern District of Pennsylvania

[Title omitted]

Order Extending Time

And now, to wit, this tenth day of September, 1932, Leon Edelson, of counsel for plaintiff, and Boyd Lee Spahr, of counsel for defendants, having appeared before the Court and consented thereto, it is hereby ordered and decreed that the return day of the citation on appeal in the above-entitled case be and the same is hereby extended up to and including October 15, 1932.

By the Court.

(Sgd.) W. H. Kirkpatrick, J.

Agreed to.

Leon Edelson, of Counsel for Plaintiff. Boyd Lee Spahr, Ballard, Spahr, Andrews & Ingersoll, of Counsel for Defendants.

IN THE UNITED STATES COURT OF APPEALS FOR THE THIRD CIRCUIT, OCTOBER TERM, 1932

No. 4986

CHARLES B. GRAY, Appellant,

v.

EASTMAN KODAK COMPANY, EASTMAN KODAK COMPANY OF NEW YORK, and EASTMAN KODAK STORES, INC., Appellees

Appeal from the District Court of the United States for the Eastern District of Pennsylvania

MOTION TO DISMISS APPEAL AND/OR AFFIRM JUDGMENT

Now come Eastman Kodak Company, Eastman Kodak Company of New York, and Eastman Kodak Stores, Inc., appellees in the above entitled cause, by their attorneys and counsel, and move the Court to dismiss the appeal herein and/or affirm the judgment from which said appeal is taken upon the ground that the record presents no question properly reviewable by this Court.

The facts upon which the above motion is based, briefly stated, are as follows:

The appeal is from a judgment entered in favor of the appellees in an action at law brought by the appellant to recover damages for patent infringement (Tr. p. 207).

The case was first tried before Judge Dickinson and a jury and resulted in a verdict for plaintiff. This verdict was set aside by the trial judge and a new trial ordered.

Thereafter, the parties, by their attorneys, entered into and filed with the Clerk of the District Court, in accord with 28 U. S. Code Sec. 773, the following stipulation (Tr. p. 197):

"And now, to wit: February 9, 1932, it is stipulated and agreed by and between counsel for plaintiff and defendant in the above entitled cause, that trial by jury is hereby waived and that the case shall be submitted to the Court for decision upon the record already made, as if the testimony and exhibits offered in evidence at the trial before

Judge Dickinson and a jury had been duly offered in evidence before the Judge who may be assigned to hear this case, subject to any objections which appear on the record, and that all motions made by either party at the said trial shall be deemed to have been made before the Judge trying the case, both parties to have the right of appeal as in other cases."

Pursuant to the above stipulation the cause came on to be heard before Judge Kirkpatrick without a jury upon the record therein referred to, the pleadings, and the arguments and briefs of counsel.

Subsequently Judge Kirkpatrick filed an extensive opinion (Tr. p. 198) discussing the various issues of fact and law involved in the case. Near the end of the opinion he wrote:

"The statements of fact contained in this opinion may be taken as findings of fact. If separate findings of fact are desired the parties may submit requests in accordance herewith" (Tr. p. 204).

Following this Judge Kirkpatrick set forth his conclusions from the facts found with respect to each of the claims relied upon by plaintiff as follows (Tr. p. 205):

"1. The combination of closed coil inner thrust member is not patentable because its elements were known to the prior art and no new mode of operation or functional relationship arises from putting them together.

2. Claims 1 and 2 cannot be interpreted as calling for a closed coil inner thrust member in view of the file wrapper history of this patent.

3. Claims 1 and 2 are anticipated.

4. Claim 3 is not infringed.

5. Claims 5 and 6 are invalid because United States patent No. 1,297,327 to Dakin and Underwood antedating the plaintiff's application discloses the method of attaching the thrust member to the stem claimed, and conclusion '1' applies to these claims."

He then concluded the opinion with the following direction: "Judgment may be entered for the defendant."

No special findings of law or fact were requested by the appellant either before or after the filing of the opinion and none were made. No motion for judgment was made on appellant's behalf either at the first or second trial. The appellant reserved no exceptions of any kind during either trial of the case. No exceptions were reserved by the appellant at any time unless it can be said that the recital in the order sealing the bill of exceptions (Tr. p. 205) that

"Counsel for the said plaintiff did then and there tender this bill of exceptions to the rulings, opinion and action of the said Court, and requested the seal of the Judge aforesaid should be put to the same"

shows a general exception taken after the trial of the case to the findings and conclusions set forth in the opinion of the Court.

The assignment of errors filed herein (Tr. p. 209) contain six specifications. Each specification is general, in contravention of Rule 11 of the Rules of this Court requiring each error to be set out particularly, the style of specification being the assertion that "The learned Trial Judge erred in finding as follows:" followed by quotation of the conclusion or order attacked. The first five specifications are addressed to the conclusions which the trial judge drew from the facts found. (These conclusions are quoted above.) The sixth specification is addressed to the order that judgment be entered for the defendants. The general findings of fact made by the trial judge are not challenged as being without support in the evidence or for any other reason by any specification of error.

In view of the foregoing facts counsel for the appellee are of the opinion that the appeal should be dismissed without further consideration upon the authority of Fleischmann Co. v. United States, 270 U. S. 349; Wilmington Steamboat Co. v. Sturgess, 55 F. (2d) 831, C. C. A. 3, and Arthur C. Harvey Co. v. Malley, 60 F. (2d) 97.

Notice of this motion has been given counsel for appellant.

Pennie, Davis, Marvin & Edmonds, Ballard, Spahr, Andrews & Ingersoll, Attorneys for Appellees.
William H. Davis, George E. Middleton, Chas. W. Riley, Boyd Lee Spahr, of Counsel.

IN THE UNITED STATES COURT OF APPEALS FOR THE THIRD CIRCUIT, OCTOBER TERM, 1932

No. 4986

CHARLES B. GRAY, Appellant,

v.

EASTMAN KODAK COMPANY, EASTMAN KODAK COMPANY OF NEW YORK, and EASTMAN KODAK STORES, INC., Appellees

Appeal from the District Court of the United States for the Eastern District of Pennsylvania

NOTICE OF MOTION TO DISMISS APPEAL AND/OR AFFIRM JUDGMENT

Please take notice that on Friday, the 9th day of December, 1932, at the opening of the court, or as soon thereafter as counsel can be heard, the motion of which the foregoing is a copy will be submitted to the Court of Appeals for the Third Circuit for the decision of the said court thereon.

Pennie, Davis, Marvin & Edmonds, Ballard, Spahr, Andrews & Ingersoll, Attorneys for Appellees.

To Thos. Raeburn White, Esq., Leon Edelson, Esq., 1505 Land Title Bldg., Philadelphia, Pa., Attorney for Charles B. Gray:

Service of the above notice and receipt of a copy of the motion therein referred to is hereby acknowledged this 29th day of November, 1932.

(Sgd.) Thomas Raeburn White.

Endorsements: Motion to Dismiss Appeal, etc. Rec'd & Filed Dec. 2, 1932. Wm. P. Rowland, Clerk.

IN THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE THIRD CIRCUIT, OCTOBER TERM, 1932

No. 4986

CHARLES B. GRAY, Appellant,

vs.

EASTMAN KODAK CO., et al., Appellees

And afterwards, to wit, the 9th day of December, 1932 come the parties aforesaid by their counsel aforesaid, and

this case being called for argument sur pleadings and briefs, before the Honorable Joseph Buffington, Honorable J. Warren Davis and Honorable J. Whitaker Thompson, Circuit Judges, and the Court not being fully advised in the premises, takes further time for the consideration thereof.

And afterwards, to wit, on the 22d day of August, 1933 come the parties aforesaid by their counsel aforesaid, and the Court, now being fully advised in the premises, renders the following decision:

IN THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE THIRD CIRCUIT, OCTOBER TERM, 1932

No. 4986

CHARLES B. GRAY, Plaintiff-Appellant,

v.

EASTMAN KODAK COMPANY, EASTMAN KODAK COMPANY (OF NEW YORK), and EASTMAN KODAK STORES, INC., Defendants-Appellees

Appeal from the District Court of the United States for the Eastern District of Pennsylvania

Before Buffington, Davis, and Thompson, Circuit Judges

OPINION—Filed August 22, 1933

BUFFINGTON, J.:

In the Court below Charles B. Gray brought an action at law against The Eastman Kodak Company, charging infringement of patent No. 1,314,867 granted to him September 2, 1919, for a power transmitting mechanism. On trial the jury found a verdict for the plaintiff of $153,553.18. Thereafter the trial Judge, feeling there was error in the trial, set the verdict aside. Thereupon the parties, by stipulation filed in court, waived a trial by jury and agreed "that the case shall be submitted to the Court for decision upon the record already made * * * both parties to have the right of appeal as in other cases." In substance, the trial was a quasi demurrer. No witnesses were examined. On final hearing neither party asked for any special findings of fact, for there were no disputed facts. The trial Judge, holding the patent did not involve invention,

directed "judgment may be entered for the defendant." Thereupon the plaintiff took, and the Court sealed, "this bill of exceptions to the ruling, opinions and action of said Court," and thereafter granted the appeal the parties had stipulated.

The case concerns kodaks, or small hand carried photographic outfits, which, by rapid shutter action, turn off or on light from its chamber (for the Latin word for a chamber is "camera") and makes possible the instantaneous taking of what are fittingly termed "snap shots". It will thus be seen that the non-moving or non-jarring of the camera and the dependable action of its shutter are vital elements in the kodak art. The shutter actuating mechanism of such art, prior to Grays patent, consisted of a hollow rubber bulb, held by the operator in the hand and connected by a small tube with the shutter-controlling mechanism. Pressure of the bulb or release of pressure moved the shutter. In the large cameras of photographic studios the rubber bulb is still in use. In the kodak art, where it was once universally used, it is now seldom seen, and not at all on new cameras.

Now while the rubber bulb on the shutter mechanism was flexible, non-kinking, and sprang back to place when bulb pressure was releaesed, it nevertheless was subject to deterioration, the rubber lost its spring, and replacement was required. The proofs show a consequent effort by the art, both here and abroad, to get away from pneumatic pressure, or an air pressure column, and substitute therefor a metallic or what is termed a "cable release" plunger pressure. This cable release or plunger consisted in the first effort—to get away from the rubber tube—of a small wire cable, and later of a non-compressible or close-wound spring. As this transition from a pneumatic to a metallic thrust has been eventually perfected, we now see that the goal to be reached, in order to make a satisfactory mechanism, was a unitary structure which coupled together the different elements of rigidity of the plunger, the flexibility of such plunger, and positive resiliency of the plunger, for plunger rigidity was necessary to effect the thrust. So also flexibility was necessary to obviate kinking; and active resiliency was required to spring the plunger back to normal shape and position. In other words, it was necessary to obtain the positive thrust and at the same time avoid

kinking of the structure as a whole. This was eventually effected in the simple mechanism of Gray, who was an experimental engineer for twenty years. The steps that were taken by him to reach this result we now consider. His device is now in universal use. But in order to appreciate what Gray actually did to solve the problem we must recognize the essential difference between a spaced, open-wound, spiral spring which is compressible, and a close-wound, spiral spring which is non-compressible. We must also recognize how objectionable was kinking; how desirable is a rubber-like flexibility; how the apparatus must be bent to the small space of a Kodak every time pictures are taken.

From the record it appeared the first step in the attempt to get away from the rubber bulb and tube of the art was the use, as a plunger, of a strand or a number of fine wires braided together. But while such wire could, under lengthwise pressure, bend and was in that sense flexible, yet it was likely to form an angle at the bending point and did not spring back to place or to normal shape. The result of this was that the wire plunger, when bent, was liable to stay "put", with the effect that when one tried to take another picture, the kinked wire plunger stayed "put" and one got no exposure and no picture because the shutter did not work. In the patent history of the development of the art the first attempt to do away with the objectionable wire plunger was made abroad in the German patent of 1902 to Wermann. He substituted for the wire plunger a spiral spring inside another coiled spring. At this point we note that both Wermann's spiral springs were close-wound and therefore non-compressible, because their close-wound coils had no open space between the leaves of the spring and, while these close-wound springs were bendable and therefore, to a degree, flexible, yet they were wholly different in operation from an open-wound spiral spring. This difference will be seen when the action of the open-wound, as contrasted with a close-wound, spring is closely observed. When such an open-wound spring is bent, the leaves freely separate to spring apart at the outer circumference and at the same time freely approach each other or compress at their inner circumference. In other words, bending of such open-wound spring makes it expand at its outer side and compress at its inner. The result is that

there is in the case of the open-wound spring, a free play in expansion and an active resiliency which, on release of pressure, brings the open-wound spring back to normal. Now it is quite evident, as the subsequent development of the art proved, that no successful plunger can be made unless an outer open-wound spring is used for enveloping. Wermann, it is true, made a step forward in substituting a spiral, close-wound spring plunger for a rigid wire. He got a plunger which was rigid yet measurably flexible, but around such close-wound plunger spring he took the fatal step of placing another close-wound spiral spring. So near the solution of the problem was he that had he used an open-wound spiral spring to envelop his close-wound spring plunger, he would then have solved the problem which Gray solved many years later. But Wermann failed to take this vital step, precisely as the great Eastman Company, with all its experience and expert skill, failed to take it years later. As a result, Wermann's device failed, and made no impress on the camera art, which continued to use the pneumatic or rubber tube. No one today would think of using Wermann's combination of a close-wound, non-compressible, spiral plunger and a close-wound, non-compressible, spiral sleeve as an envelope. While Wermann suggested the use of a non-compressible, spiral spring plunger (which is used in the present art) his contribution to the art was to teach it how to make it not work because of the close-wound spiral spring he used as an envelope.

The next attempt was also made abroad in the British patent of Edwards in 1905. As we understand, Edwards differed, inter alia, from Wermann in one vital particular—he discarded the close-wound, spiral plunger of Wermann and went back to the objectionable wire or wire plaited rigid plunger of the old art. In that regard the Court below held, and rightly so, that the disclosure of Edwards' patent of 1906 "as to the innermost member means what the plaintiff says it does, namely, that it may be formed of wires held together by a closely coiled spiral and that it does not call for a closely coiled spiral alone." This conclusion is strengthened by the fact that the same Edwards in his American patent of 1906 shows the innermost metallic pusher as being wire, saying, "b is the flexible innermost member and is advantageously composed of a strand of thin flexible wires in such wise as to be incompressible,

...ing the strain (pressure) to which same is normally ... Subsequent development shows conclusively that ... of a wire plunger was fatal to the utility of Ed... device. Instead of advance in the art, Edwards ... backward step in his use of kinking wires which ... fatal. Edwards taught the art nothing except ... by his precept and example. Like Wermann, Ed... was not an enlightening and helpful white light, ... light showing what the art should avoid.

... attention is also called to the patent to Duryea, No. ... of 1911. But this shows an even more radical ... from the mechanism by which the plunger prob... was finally solved. Duryea went back to an incom... outer spiral. "I overcome", he says, "these ... by rendering the flexible outer member inexten... as well as incompressible." He used wire for his ... instead of a spiral, as his patent says, "and by ... for the inner member a wire of high elasticity."

... will thus be seen that up to 1917 the problem of a suc... metallic plunger had not been solved and a great ... like the Eastman, with its skilled engineers, con... to use the rubber bulb with the pneumatic push. ... its assigned patent No. 1,297,327, through ... employees, recognition is made by the Eastman ... of existing difficulties in cable or plunger devices. ... "The present invention relates to photography ... more particularly to shutter actuating devices of the ... known as cable release, in which two laterally flexible ... one working within the other and terminating ... movable finger pieces, are connected, respec... shutter casing and an operating part thereof ... a means for actuating the shutter without jarring ... camera and in a convenient and comfortable manner. ... the invention has for its object to increase the flexibil... of the members so that extreme distortions thereof will ... result in permanent kinks or bends that would inter... with the relative sliding movement of the members." ... objects of plunger non-kinking and camera non... Eastman's patentee sought to obviate by sleeving ... wire spiral within another, but Eastman's fatal mis... was that both spirals were close-wound. The specifi... describes the inner spiral as "closely wound incom... wire helix". It is further described as being

"as flexible as the outer helix 5 and more so." We therefore have in this Eastman employee's patent a close-wound, incompressible wire plunger and an enveloping close-wound non-compressible spiral spring even less flexible than the inner one. From this it will be seen that no one in the art up to 1917 had placed a close-wound, spiral plunger inside an open-wound spiral.

In 1918, sixteen years after the German patentee, and thirteen years after the British patentee, failed to solve the problem, the plaintiff applied for the patent in suit. Without at present entering into details, it suffices to say that he therein disclosed for the first time in the kodak art a close-wound, spiral wire spring as a plunger and an open-wound spiral tube surrounding it. This is aptly stated in the opinion of the trial Judge, who says:

"It is the plaintiff's claim, however, that he first invented the combination of a *closed* coil for the thrust member with an *open* coil for the sheath. By a closed coil is meant one in which the spirals are in contact throughout so that the whole is incompressible lengthwise. In an open coil the adjacent spirals are spaced. Both in his testimony at the trial and through his counsel in argument the plaintiff urged that this combination of closed inner and open outer coils is the essence of his patent and his real contribution to the art."

It is also shown by Gray's drawings and specification, which latter reads as follows: "This mechanism comprises two important features. One of these is the closely-wound coiled wire transmission tube, J, connected with the stem, F, and the slide member, I, whereby there may be transmission without lost motion. The other of these features is the forming of the outer coiled wire tube, G, in such manner as to permit bending the tube without material separation of the coils at the outer side of the curve, the spacing between the coils permitting the coils to approach each other on the inner side of the curve while the tube is being bent. The member, I, being free to slide, the adjacent end of the inner wire tube, J, is free to move endwise when the mechanism is being bent. In this manner, the inner tube, although closely-wound, adapts itself to the bending without kinking. Practice has shown that a mechanism of this construction may be bent an indefinite number of

times without kinking or otherwise disabling the coiled wire tubes." The résumé of the prior art shows Gray's patent first disclosed this combination. Assuming such was the case, the Court below held this novel combination was a mere aggregation or selection of previously known objects and the combination did not involve invention. In other words, the patent of the man who solved the problem and made the metallic plunger work is declared void by reason of patents of men which did not work and disclosed no such combination as did Gray, of a close-wound inner coil and an open wound, enveloping outer coil.

Turning to that question, we note the three requirements of a valid patent—novelty, usefulness, invention. As to the first requirement, there is no question. The proofs simply show, and there is no proof to the contrary, that prior to Gray, no one had disclosed that combination. It was, therefore, novel. As to its usefulness, it is shown that after the defendants saw Gray's combination, they ceased making other types, and concede that since then they have made and marketed one million of Gray's device. The defendants' adoption and use prove its usefulness. In that regard this Court, in 261 Fed. 362, said:

"The imitation of a thing patented by a defendant who denies invention, has often been regarded, perhaps especially in this circuit, as conclusive evidence of what the defendant thinks of the patent and persuasive of what the rest of the world ought to think."

Was it inventive? The testimony of defendants' witness, Christie, who was the general foreman in charge of Eastman's experimental work, is conclusive and uncontradicted. Christie testified:

"Q. Did you remain with the Eastman Company continuously from 1913 to date?

A. The latter part of December, 1917, I enlisted in the army, and was discharged and returned to work at Eastman Kodak in May of 1919.

Q. When you went to the war, what type of cable release was the company manufacturing?

A. They were manufacturing the close-wound outer casing and close-wound coil cable.

Q. Before you went to the war they had substituted the close coil inner cable for *straight wire* cable?

A. That is right.

Q. And when you came back from the war what were they manufacturing?

A. They were manufacturing the *spaced open wound* outer casing and the close coil cable.

Q. That is the present construction?

A. Correct.

Q. Can you tell us the purpose and effect of these changes in the construction of the release?

A. *Each change was an attempt to obtain a more flexible cable release.*

Q. That is the *coiled push member* or cable was more flexible than a *straight wire* cable is that right?

A. It was.

Q. *And the open coil casing was more flexible than the closed coil casing?*

A. It was."

But not only was there no contradiction of this affirmative proof of this witness in charge of the Eastman's experimental work, but the contention of lack of invention was evidently an afterthought, for at the first trial no such contention was made. In that regard, at the jury trial, the Judge stated to the jury: "I have called your attention to these three elements—invention, utility, novelty. Invention, as I understand it, is not in real controversy here. So, you need not trouble yourselves about it."

We here again note—for it cannot be too strongly stated—that in this case there are no disputed facts. The significant, undisputed facts are that both close-wound and open-wound coil springs were well known mechanisms in use in the Kodak art. The further undisputed fact is that Gray was the first to use in combination a close-wound interior coil and open-wound exterior coil, and the consequent crucial question is did such conjoint use involve invention? On that question the trial Judge made no finding of fact, but confined himself to an expression of opinion, saying: "I am unable to see how the advantages of the particular types selected by the plaintiff for each of these members are enhanced or in any way affected by the character of the other member, or to find anything new in the functional relationship between them." Not only has this expression of opinion no testimony in the record to support it, but, as we have noted in the evidence produced

by the defendant itself in the testimony of its witness Christie, quoted above, the proof by this experimental man, the foreman of Eastman's experimental work, is that by the combination of Gray's close-wound inner and open-wound outer coils a new and increased flexibility was obtained, and that to such a degree that this great company, as soon as Gray showed them his device and they cut open the exterior textile jacket to see *how* this flexibility was effected, at once abandoned their rubber device, ignored and abandoned the attempt of their employee to supplant the rubber tube practice, and immediately began to make Gray's device by the hundreds of thousands, and wherever the Kodak goes, Gray's tube goes with it to make it dependable. Christie's proof of the combination's increased flexibility is undenied and undeniable. Here stands the defendants' undenied proof:

"Q. When you went to the war, what type of cable release was the company manufacturing?

A. They were manufacturing the *close-wound outer* casing and *close-wound coil* cable.

Q. Before you went to the war they had substituted the close-coil inner cable for straight wire cable?

A. That is right.

Q. And when you came back from the war what were they manufacturing?

A. They were manufacturing the spaced *open-wound* outer casing and the *close-coil* cable.

Q. That is the present construction.

A. Correct.

Q. Can you tell us the *purpose* and *effect* of these changes in the construction of the release?

A. *Each change* was an attempt to obtain a more flexible cable release.

Q. That is the coiled push member or cable was more flexible than a straight wire cable, is that right?

A. It was.

Q. And the open coil casing was *more flexible* than the closed coil casing?

A. It was."

In the face of such testimony, produced by the defendant itself, in the absence of any proof to the contrary, and in view of the *sale* of a million of the Gray combination, it will be seen that, with all due respect to the statement of

the trial Judge that he was "unable to see how the advantages of the particular types" were "enhanced or in any way affected by the character of the other member", his opinion must, and should, give way to the proofs in the case furnished by defendant's witness and by the action of his company in abandoning the old practice and taking up Gray's device.

To the contention of the defendant that Gray's new combination of old elements had no patentable merit, the sufficient answer is Christie's testimony—as of old, "out of thine own mouth do I convict thee." Moreover, in addition to this proof of the new function of increased flexibility, we think the trial Judge failed to give due weight to the presumption of invention arising from the grant of the patent. In the proceedings in the patent office, there were, as is here the case, no disputed facts. Open-wound coils and close-wound coils were known agencies. Gray's combination of an open-wound coil enveloping a close-wound coil was new, and the sole question before the patent office, as here, was whether such combination of the two warranted, under the law, the grant of a patent. This question of law was decided in favor of the patentee, for as we have said there was no conflict of fact before the patent office, and under the authorities raised a presumption of law that the device involved invention. In that regard the Supreme Court, in 220 U. S. 428, said:

"It (the invention) possesses such amount of change from the prior art as to have received the approval of the Patent Office, and is entitled to the presumption of invention which attaches to a patent."

And where, as here, all the alleged anticipatory patents now cited were considered by the patent office, the presumption is materially increased and the grounds for invalidating the patent must be correspondingly greater. See cases cited in Walker on Patents (6th Edition) § 535.

Moreover, apart from the undisputed facts and from there being the proof of the increased flexibility of the Gray combination, we think the patent should not have been held invalid. There being no question as to the facts, the Court below was confronted with the legal question of whether the making of the combination, which was novel and useful also, involved invention. In that regard the Court held:

"Taking the question in its broadest aspect and assuming, as the plaintiff contends, that all the claims (including 1 and 2) can be so construed as to include the combination which he says constitutes his real invention, *I am satisfied that it amounts to nothing more than an assembly of two selected elements, neither of them new, without any new joint function, and hence is unpatentable.* Of course, they cooperate and whoever first combined a flexible inner thrust member with a flexible outer sheath in a cable release may have produced a real invention, but when that had been done, and especially after coiled wire tubes had been evolved for both members, the selection of superior forms of coils from the prior art produced no new result as the product of the combination. Whatever advance there may have been was simply an aggregate of several results, each the complete result of one of the combined elements. The principle is too well established to require citation of authority."

Was the Court right in so holding? In taking up that question, we have this situation. The use of a plunger or inner member of a close-wound, non-compressible spiral spring was old. Wermann used it in Germany and the defendant had used it in America, but neither of them had sleeved it in an open-wound coil. So also the use on an outer or envelope member of close-wound coil was old. It had been so used in Britain by Edwards, but he used it as an envelope around a wire plaited plunger. Now the concept of Gray was to take the two well known devices of the prior art and for the first time use them conjointly; the close-wound coil as a pusher or plunger and the open-wound coil as an envelope. What was the effect of this novel combination? Christie answers that question. By this novel union Gray got a photographic mechanism which was so superior to prior devices that it superseded and displaced all other and has been used by over a million users who bought from the defendant. Why this almost unprecedented result? A study of the prior structures and the exhibits in the record shows that Gray has produced a device which, while it retains the pusher rigidity of a wire, has done away with kinking and has furnished a mechanism which is as soft to the touch and as flexible as the rubber device of the old one which was abandoned, and at the same time has given a non-kinking plunger that is as rigid as a stiff wire.

In other words, Gray gave to the Kodak the pliable, non-kinking features of the rubber tube, while at the same time he has retained the rigidity of a metal pusher without destructive kinking. This has been done not by merely using the two different kinds of coils, but by using them in a new relation, namely, by using the close-wound coil in the only place where it can be functionally modified by the outer open-wound coil and by using the open-wound coil in the only place where it can be modified by the inner placed close-wound coil. If Gray's relative positions were changed, if his open-wound coil was placed on the inside, and his close-wound one on the outside, if both coils were close-wound, or both were open-wound coils, such changes would be fatal. It is the new, inner and outer positions and relations in which these two different kinds of coils are placed that enables the outer coil to affect the inner and the inner to affect the outer as they never had before. This fact—for such it is—of the two coils, due to their relative position, affecting each other, is so original and seemingly so non-apparant as to lead to the belief that there is a mere aggregation of non-interlocking parts. But treating it as an aggregation with no new resultant function shows how really inventive, when duly appreciated, the new combination was. It took original thought to conceive and effort to embody the conception in practice. The effect of the novel combination of the two well known types of coils would occur only to the inventive mind, for other types of mind would naturally suppose that, used conjointly, they would operate in the old way. But the outcome proved otherwise. Moreover, the union of the two—one enveloping the other—only came after attempts for years to improve cable release. Enveloping the pusher member with a spring was known. The rigidity of a close-wound coil was known. So also was the expansibility of a loose-wound coil. Yet, strange as it seems, no one, prior to Gray, thought of nesting the former inside the latter. And when Gray disclosed it, as he did when he sent one of his devices to the defendant, it was jacketed by a textile cover. The defendant evidently could not understand how the rubber-like flexibility was effected and Gray's testimony, while not of facts, has the impress of certainty when he testified: "The cover was evidently slitted to see what was in the inside, to see the construction." They cut it open to see by what means he did it, at once recognized its worth, dis-

carded their then type and adopted his. Now that it has proved its worth, his device deserves judicial recognition and its infringement due money reparation. The proofs show defendants have profited largely from it.

Why should they not now share that profit with the one who devised it? In answer to this question it is contended that under the pleadings and procedure in this case the decision of the trial Judge is final and conclusive on the question of invention. In effect this means that if the Circuit Court of Appeals, and consequently the Supreme Court, should be of opinion there was invention, and that of a high order, they are powerless to so decree. We cannot concede the helplessness of appellate tribunals to right such a wrong and we think the authorities support such conclusion.

It will be observed that there is, and was, no dispute as to facts. No terms of art were involved. The specification was self-explanatory. The elements were all old. No issues of fact were raised. The defendant, by the testimony of its witness Christie, conceded the increased flexibility effected by the combination. In addition to which there was the presumption of law created by the grant of the patent. Such being the situation, the case falls within the principle laid down in Heald v. Rice, 104 U. S. 749, where, in reviewing an action of law on a patent, the Supreme Court, referring to the question of identity of invention, held:

"In the present case the question of the identity of the invention in the original and reissued patents is to be determined from their face by mere comparison, notwithstanding what was said in Battin v. Taggart (17 How. 74), and consistently with Bischoff v. Wethered (9 Wall. 812), according to the rule laid down in Seymour v. Osborne (11 Wall. 516), and Powder Company v. Powder Works, supra. That is, if it appears from the fact of the instruments that extrinsic evidence is not needed to explain terms of art, or to apply the descriptions to the subject-matter, so that the court is able from mere comparison to say what is the invention described in each, and to affirm from such mere comparison that the inventions are not the same, but different, then the question of identity is one of pure construction, and not of evidence, and consequently is matter of law for the court, without any auxiliary matter of fact to be passed upon by a jury, if the action be at law."

Moreover, the case falls within the principle laid down in Singer v. Cramer, 192 U. S. 275, where, in reviewing an action at law and referring to the question of infringement, which is more akin to a question of fact than is the question of invention, the Supreme Court (the italics are ours) said:

"From the view we take of the case it is unnecessary to consider and decide any other assignment than that based upon the exception to the refusal of the court, at the close of all the evidence, to instruct a verdict for the defendant on the ground that 'no infringement whatever had been shown.' *As in each of the patents in question it is apparent from the face of the instrument that extrinsic evidence is not needed to explain terms of art therein, or to apply the descriptions to the subject matter, and as we are able from mere comparison to comprehend what are the inventions described in each patent and from such comparison to determine whether or not the Diehl device is an infringement upon that of Cramer, the question of infringement or no infringement is one of law and susceptible of determination on this writ of error.*"

This statement is, in substance, taken from Heald v. Rice, 104 U. S. 749, which was a review of an action at law involving the validity of a reissued patent and where the question of invention had to be determined, for if the original patent and the reissue were not for the same invention, the reissued one was invalid. In addition to the substance of what we quote above, the Court held in Heald v. Rice, supra, that "the question of identity is one of pure construction and not of evidence, and consequently is matter of law for the court, without any auxiliary matter of fact to be passed upon by a jury, if the action be at law."

The same principle was followed in Market St. Rwy. Co. v. Rowley, 155 U. S. 625, where the Court reviewed the action of the court below in an action of law on a patent. Therein the Court said:

"Did the court below err in refusing to instruct the jury to find a verdict for the defendant on the ground that the patent sued on was void for want of novelty?

The defendant put in evidence a number of patents prior in date to the plaintiff's, and asked the court to compare the inventions and devices therein described with those

claimed by the plaintiff. No extrinsic evidence was given or needed to explain terms of art, or to apply the descriptions to the subject matter, so that the court was able, from mere comparison, to say what was the invention described in each, and to affirm from such mere comparison whether the inventions were or were not the same. The question was, then, one of pure construction and not of evidence, and consequently was matter of law for the court, without any auxiliary fact to be passed upon by the jury.

If, upon the state of the art as shown to exist by the prior patents, and upon a comparison of the older devices with those described in the patent in suit, it should appear that the patented claims are not novel, it becomes the duty of the court to so instruct the jury."

The opinions in each of the three cases cited above show that the questions of infringement or validity in each were much more involved and complicated than the simple one before us. Had the present case been tried with a jury, it is clear that with no issue of fact involved, with the presumption of validity created by the grant of the patent, with the affirmative testimony of defendant's witness Christie showing gained flexibility, with no contradictory testimony whatever, it would have been the duty of the court to instruct the jury the patent was valid and infringed. That jury trial was waived in no way changed this question of law into one of fact or prevents this Court from reviewing the action of the trial Judge in holding this patent invalid.

The length of this opinion leads us not to enter into a discussion of the other points argued on behalf of defendant. All of them have had due consideration. We limit ourselves to saying we find nothing in the proceedings in the patent office to affect the validity of Gray's claims. His original application had an undue number of claims and duplications in many cases, and these were cut down. But we note that his specification sets forth one, and one only, basic alleged invention, namely, the close-wound inner and the open-wound enveloping coil which were clearly described, illustrated in drawing, and carried into claims one and two by the terms, "in a mechanism of the nature described", and "substantially as described", or, as said in Seymour v. Osborne, 11 Wall. 516: "Where the claim immediately follows the description of the invention it may be construed in connection with the explanation contained in the specifications,

and where it contains words referring back to the specifications, it cannot properly be construed in any other way." Such device was not shown in the cited prior patents and, therefore, required no modification of the claims, and these claims were never modified beyond a minor change in adding an omitted element, viz: "a barrel in the outer head". Indeed, no reason appears precluding the allowance of patent protection for Gray's novel combination of the inner close-wound and the enveloping open-wound coil which the defendant has exactly duplicated. So holding, the judgment below is reversed, a new trial is granted, and the record remanded for due procedure in accord with this opinion.

A true copy. Teste:

——— ———, Clerk of the United States Circuit Court of Appeals for the Third Circuit.

IN THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE THIRD CIRCUIT, OCTOBER TERM, 1932

No. 4986

CHARLES B. GRAY, Appellant,

vs.

EASTMAN KODAK CO. et al., Appellees

On appeal from the District Court of the United States, for the Eastern District of Pennsylvania

This cause came on to be heard on the transcript of record from the District Court of the United States for the Eastern District of Pennsylvania and was argued by counsel.

On consideration whereof, it is now here ordered and adjudged by this Court that the judgment of the said District Court in this cause be, and the same is hereby, reversed, with costs, a new trial granted, and the case remanded for further procedure in accordance with the opinion of this Court.

Philadelphia, August 22, 1933.

Per Curiam:

Buffington, Circuit Judge.

Endorsements: 4986. Order Reversing Judgment with Costs, etc. Rec'd & Filed Aug. 22, 1933. Wm. P. Rowland. Clerk.